A COMPREHENSIVE AND PROCEDURAL APPROACH

IN

ADVANCED FINANCIAL ACCOUNTING AND REPORTING

(For Accounting Students and CPA Reviewees)

2020 Edition

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Preface

This book is the **first edition** of Advanced Financial Accounting and Reporting (authored by Punzalan, Laco, and Ferrer), a new subject in CPA Board Examination introduced by the Board of Accountancy to take effect starting May 2016 CPA Examination. However, this book has been in circulation in sixteen editions since 1999 as Practical Accounting 2/AFAR (authored by Punzalan) and being used by accounting students and CPA candidates. Based on the syllabus issued by the Board of Accountancy, the author transformed Practical Accounting 2 to Advanced Financial Accounting and Reporting with several topics included like, Revenue Recognition (PFRS 15), Accounting for Insurance Contracts, Accounting for Small and Medium-Sized Entities (SMEs), and Accounting for Build, Operate, and Transfer.

It has undergone significant changes to incorporate the periodic updates in related topics caused by revisions in applicable accounting standards both local and international. It aims to develop the necessary knowledge, skills and values of future Certified Public Accountants in Advanced Financial Accounting and Reporting topics and to apply the same when dealing with different issues based on applicable PAS/IAS, PFRS/IFRS, NGAS, and PPSAS. Hence, the authors rooted the contents of this piece of work from different sources of accounting related professional examinations here and abroad; such as, the Philippine CPA Examination (RPCPA), American Institute of CPA (AICPA), Australian Accounting Standards Board (AASB), Institute of Chartered Accountants (ICA) and other sources, for which the authors remain grateful. In providing solutions to the multiple choice questions, the authors used simplified approaches and detailed explanation for better understanding of the users of this book.

The authors shall appreciate suggestions and comments from colleagues and users of this humble piece of work.

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Dedications

Above all, to God Almighty, without whom nothing would have been possible.
To my beloved wife, Elvie;
To my children: Bensan, Zhet, Leroi, and Immanuel;
To my grandchildren: Asher, Nathan and Isaiah.

Angelito R. Punzalan

To God Almighty,
To my family,
To my friends and students.

Atty. Reginald L. Laco

To God Almighty,
To my family,
To my friends and students.

Dr. Rodiel C. Ferrer

"If the ax is dull, and one does not sharpen the edge;
then, he must use more strength; but wisdom brings success." (Ecclesiastes 10:10) (NKJV)

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Chapter 1

PARTNERSHIP

INTRODUCTION

This book was prepared according to the CPA Licensure Examination Syllabus in Advanced Financial Accounting and Reporting, effective May 2016, which provides that Partnership Accounting covers the following:

1. Formation
2. Operations
3. Dissolution/Changes in Ownership Interest
    - Admission of a new partner
        a. By purchase of interest
        b. By investment
        c. Withdrawal, retirement or death of a partner
        d. Incorporation of a partnership
4. Liquidation
    a. Lump-sum method
    b. Installment method

PARTNERSHIP FORMATION

A primary advantage of the partnership form of entity is ease of formation. The agreement to form a partnership may be informal as a handshake or as formal as many-paged contract.

Contract of Partnership is a contract of two or more persons who bind themselves to contribute money, property, or industry to a common fund, with the intention of dividing the profits among themselves. It may also be formed by two or more persons for the exercise of a common profession.

The partnership is a separate accounting entity, and therefore, its assets and liabilities should remain separate and distinct from the individual partner's personal assets and liabilities. Thus, all assets contributed to the partnership are recorded in the books of

the partnership at their *fair market values*, and all liabilities assumed by the partnership are recorded at their *present values*.

The accounting problems peculiar to a partnership relate to the measurement of the individual partners' ownership equities or interests in the partnership. A partner's interest in a firm should be distinguished from the right to share in firm's profits. A partner's interest is summarized in an individual capital account and consists of the original investment, subsequent additional investments and withdrawals, and the partner's share of firm's profits and losses.

ALLOCATION OF PARTNERSHIP INCOME OR LOSS

Partners may agree to share profits and losses in any manner, irrespective of capital interests. This agreement should be stipulated in the articles of partnership. In the absence of an expressed agreement, profits and losses shall be divided based on the contributed capital of the partners.

Generally, the division of partnership income should be based on an analysis of the correlation between the capital and labor committed to the firm by individual partners and the income that subsequently is generated. As a result, profits might be divided in one or more of the following ways:

1. Profit and Loss Ratio

This method obviously provides a simplified way and equitable division of profits. Normally, the ratio designed for the division of profits also is used for the division of losses, unless a specific provision to the contrary exists.

Division of partnership profits should be based on profit agreement of the partners. In the absence of profit agreement, the industrial partner shall first receive a just and equitable share in the profits before distribution to capitalist partners. The remaining profits shall be distributed to the capitalist partners based on the following order of priority:

a. Capital contribution ratio of capitalist partners.
b. Equally on the presumption that the contribution of capitalist partners is equal.

In case of capitalist-industrial partner, he shall receive a just and equitable share in the profit for being an industrial partner and then he shall also share

in the remaining profits as a capitalist partner on the basis of (1) capital contribution ratio of capitalist partners or (2) equally with the capitalist partners

In case of partnership losses, it should be divided based on loss agreement. In the absence of loss agreement, the industrial partner shall be exempted from sharing in losses. The losses shall be distributed to the capitalist partners based on the following order of priority:

a. Profit agreement of capitalist partners.
b. Capital contribution ratio of capitalist partners.
c. Equally on the presumption that the contribution of capitalist partners is equal.

In case of capitalist-industrial partner, for being an industrial partner, he shall not share in losses but for being capitalist partner he shall share in the losses on the basis of (1) profit ratio of capitalist partners; (2) capital contribution ratio of capitalist partners; or (3) equally with the capitalist partners.

The above agreements as to the division of profits or losses must be mutually agreed upon by all partners. The unilateral designation of profits or losses by a single partner without the consent or approval by all the partners is void because it is violative of the concept of mutuality of contract.

Any stipulation excluding any partner from share in partnership profit is void and stipulation excluding a capitalist partner from share in partnership losses is void. However, stipulation excluding an industrial partner from share in partnership loss is valid.

2. Capital Investment of Partners

The division of the portion of the profit using the capital investment of partners may be accomplished by imputing interest on the invested capital at some specified rate. This interest is not viewed as a partnership expense, but rather as a means of allocating profits and losses among partners. When this approach will be used, the partnership agreement should specify the partners' capital investment whether the capital balances are before or after their respective withdrawals; capital investment at the beginning or end of an accounting period or the weighted average capital during the period.

3. Services Rendered by Partners

Normally, the profit and loss agreement recognizes variations in effort by calling for a portion of income to be allocated to partners as salaries, which, like interest on capital investments, are viewed as a means of allocating income rather than as an expense. Thus, this treatment of partners' salaries differs from the treatment of employee/shareholder salaries in a corporation.

To reward partners' services to the partnership beyond that already recognized by salaries and/or interest, bonuses may be provided to partner/s. The bonus may be expressed as a percentage of partnership net income before or after bonus.

4. Allocation of Profit Deficiencies and Losses

When the partnership income was large enough to satisfy all of the provisions of the profit and loss agreement, the allocation of profit may be simple; however, if the income is not sufficient or an operating loss exists, one of the following alternatives may be used:

a. Completely satisfy all provisions of the profit and loss agreement and use the profit and loss ratios to absorb any deficiency or additional loss caused by such action.

b. Satisfy each of the provisions to whatever extent it is possible. In other words, satisfy each of the provisions based on the order of priority agreed by the partners.

PARTNERSHIP DISSOLUTION (CHANGES IN OWNERSHIP)

Partnership dissolution is the change in the relation of the partners caused by any partner ceasing to be associated in the carrying on of the business. In other words, a partnership is said to be dissolved when the original association for purposes of carrying on activities has ended. Although dissolution brings to an end the association of individuals for their original purpose, it does not mean the termination of business or even an interruption of its continuity. *Partnership liquidation* is the process of settling the disputes or affairs of the partnership after dissolution or winding up of the partnership business; while, *partnership termination* refers to the point when all the business or affairs of the partnership are completely wound up.

The following would cause the dissolution of a partnership without violation of the agreement of the parties:

a. By the termination of the definite term of the partnership.
b. By the attainment of the particular undertaking specified in the agreement.
c. By the express will of all the partners who have not assigned their interests or suffered them to be charged for their separate debts, either before or after the termination of any specified term or undertaking.
d. By the expulsion of any partner bona fide or in good faith from the business in accordance with such power conferred by the agreement of the parties.

Automatic dissolution of a general partnership may be caused by:

a. In contravention of the agreement between the partners, by the express will of any partner at any time such as withdrawing from the partnership.
b. When any event makes it unlawful for the business of the partnership to be carried on or for the members to carry it on in partnership.
c. Loss before delivery of property where the partner contributed only its use or enjoyment or in case of universal partnership of profits.
d. Loss after delivery of property where the partner contributed only its use or enjoyment or in case of universal partnership of profits.
e. Loss before delivery of specific thing, which a partner has promised to contribute to the partnership or in case of universal partnership of all present property.
f. By the death of any partner.
g. By the insolvency of any partner.
h. By the insolvency of the partnership.
i. By the civil interdiction of any partner.

Grounds for court-ordered dissolution of general partnership also known as non-automatic causes of dissolution of general partnership include the following:

a. A partner has been declared insane in any judicial proceeding or is shown to be of unsound mind.
b. A partner becomes in any way incapable of performing his part in the partnership contract.
c. A partner has been guilty of such conduct as tend to affect prejudicially the carrying on of the business.
d. A partner willfully or persistently commits a breach of the partnership contracts
e. The business of the partnership can be carried only at a loss.
f. Other circumstances that render dissolution equitable.

ADMISSION OF NEW PARTNER

One of the most common changes in the structure of a partnership is the admission of a new partner. The admission of a new partner is subject to the unanimous approval of the present partners. Consequently, this will result in the legal dissolution of the existing partnership and the beginning of a new one.

An individual can gain admittance to a partnership by:

1. purchasing the interest of one or more existing partners, or;
2. investing assets directly in the partnership.

Purchase of Partner's Interest

The admission of a new partner by purchase of interest from a current partner is a personal transaction between the new and current partner. This type of transaction is deemed outside the partnership; thus, any money and other consideration exchanged is not recorded in the books of the partnership. The only journal entry necessary in the partnership's books is the transfer of the selling partner's capital interest and income ratio.

Investment in the Partnership

Unlike the purchase of partner's interest, the admission of a new partner by an investment of assets in the partnership is a transaction between the new partner and the partnership. This transaction increases both the net assets and the total capital of the partnership; in which case, further complications occur when the new partner's investment is less than or more than the capital acquired. When the amount paid and capital acquired are not the same, the difference is considered bonus either to:

1. the old (existing) partners
2. the new partner

It should be noted, that the goodwill method is no longer used in partnership accounting. The recognition of goodwill poses definite theoretical problems. IFRS/PFRS #3, Business Combination, provides that goodwill represents the excess of cost of the business combination over the fair value of the identifiable net assets acquired. Therefore, the use of the goodwill method in admission and disassociation of partner in the partnership is not covered this standard. Under IFRS/PFRS #3, goodwill was recognized as a result of acquisition made by the reporting entity. In the traditional accounting point of view, goodwill had a historical cost. Partnership

goodwill has no such cost and the business recognizes an asset even though no funds have been spent.

Bonus

The bonus method uses capital interest transfers among the partners to align the total resulting capital of the partnership. Under this method, net assets remain at their historical cost bases to the partnership.

- **No bonus**

  When the new partner's investment into the partnership is equal to the ownership interest credited to him/her, no bonus is recognized.

- **Bonus to the Old (Existing) Partners**

  In admitting a new partner into the partnership, the fair value of the partnership assets may be higher than their book value effected by its appreciation. Another point is, the partnership has been profitable. So to make up the difference between the fair value and book value of the assets, as well as the profitability of the partnership, the new partner is usually willing to pay the bonus to become a partner.

  A bonus to the old partners results when the new partner's investment in the partnership is greater than the capital credit on the date of admission; thus, the capital balances of the existing partners increase. The partnership allocates the bonus to them on basis of their income ratios before the admission of the new partner.

- **Bonus to the New Partner**

  A bonus to a new partner results when the new partner's investment in the partnership is less than his/her capital credit. This may occur when the partnership is in need of cash to expansion or to meet maturing debts, the new partner's excellent reputation or valuable contacts, etc.

  A bonus to a new partner results in a decrease in the capital balances of the old partners. The amount of the decrease for each partner is based on their income ratios before the admission of the new partner.

DISASSOCIATION OF PRESENT PARTNER

A partner may decide to withdraw from the partnership, or death or retirement can occur. Whether death or other reason caused the disassociation of a partner from the partnership, a final distribution will not necessarily equal the book value of the partner's capital account. A capital balance is only a recorded historical transaction that rarely represents its true value. Similar with the discussions in the preceding section, the goodwill method is no longer used in partnership accounting; thus, the disassociation of a partner from the partnership and the resulting distribution of partnership net assets be accounted by the bonus method. This may be accomplished by either:

1. payment from partners' personal assets, or,
2. payment from partnership assets.

Payment from Partners' Personal Assets

Disassociation from the partnership through payment from partners' personal assets is a personal transaction between the partners. It is a direct opposite of purchase of partners' interest in admission of a new partner. In this case, the remaining partners pay the outgoing partner directly from their personal assets; thus, the partnership assets are not involved and the total capital does not change. The effect on the partnership is limited to changes in the partnership capital balances.

Payment from Partnership Assets

On the other hand, disassociation of a partner from the partnership through payment from partnership assets is a transaction that involves the partnership. Both partnership net assets and the total capital decrease as a result of this payment. Using partnership assets to pay for a withdrawing partner's interest is the opposite of admission of a new partner through investment in the partnership.

Again, similar with the preceding discussions where goodwill in no longer used in partnership accounting, any difference between the amount paid and capital balance of the outgoing partner is treated as bonus either to the retiring/withdrawing partner or to the remaining partners.

Bonus to the Retiring/Withdrawing Partner

A partnership may pay bonus to an outgoing partner when:

1. the fair value of the partnership assets is greater than their book value.
2. there is the partnership superior earnings record.
3. the remaining partners are eager to remove the partner from the partnership.

At the time of retirement/withdrawal, the partnership deducts the bonus from the remaining partners' capital balances on the basis of their income ratios.

Bonus to the Remaining Partners

The retiring/withdrawing partner may give bonus to the remaining partners when:

1. the recorded assets are overvalued.
2. the partnership has a poor earning record.
3. the outgoing partner is eager to leave the partnership.

In this case, the cash paid to the retiring/withdrawing partner is less than his/her capital balance. The partnership allocates the bonus by increasing the capital accounts of the remaining partners on the basis of their income ratios.

PARTNERSHIP LIQUIDATION

Liquidation is the winding up of the partnership business, which is the selling of its all noncash assets, payment of its liabilities, and final settlement to the remaining partners.

Limited partners are liable to the limited partnership's liabilities but only up to the extent of their capital contribution. **General partners** are liable pro-rata and subsidiarily to limited partnership's liabilities up to the extent of their separate assets after the exhaustion of partnership's assets.

Payments of partnership liabilities and equity in **General Partnership** in liquidation may be distributed based on the following order of priority:

1. Those owing to the creditors other than partners.
2. Those owing to partners other than for capital and profits.
3. Those owing to partners in respect of capital.
4. Those owing to partners in respect of profits.

Payments of partnership liabilities of **Limited Partnership** in liquidation may be distributed based on the following order of priority:

1. Those owing to creditors, including limited partners for advances made to partnership.
2. Those owing to limited partners by way of their share of the profits and other compensation by way of income on their contribution.
3. Those owing to limited partners in respect to the capital or their contributions.
4. Those owing to general partners other than for capital and profits.
5. Those owing to general partners in respect to profits.
6. Those owing to general partners in respect to capital.

A limited partner has the right to demand and receive cash in return for his contribution irrespective of the property contributed in the following period:

a. On the dissolution of limited partnership.
b. When the date specified in the certificate for the return of limited partner's capital contribution has arrived.
c. After the limited partner has six months' notice in writing to all other members, if no time is specified.

The following is the order on priority of claims against the separate property of a partner who is insolvent or whose estate is insolvent.

1. Those owing to separate creditors of the partner.
2. Those owing to partnership creditors.
3. Those owing to partners by way of contribution.

A general partner, whether capitalist or industrial, shall be liable pro rata and subsidiarily with all their separate property and after all the partnership assets have been exhausted.

The liabilities of a newly admitted partner for partnership debts are as follows

1. He is liable for all the obligations of the partnership arising before his admission as though he had been a partner when such obligations were incurred, except that this liability shall be satisfied only out of partnership property. unless there is a stipulation to the contrary. (Limited Partner for Partnership Obligation arising before his admission)
2. He is liable pro-rata and subsidiarily for all obligations incurred after his admission as a partner. (General Partners for Partnership Obligation arising after his admission)

The following are exceptional cases wherein the partnership shall be solidarily liable with all the partners and wherein all partners are liable solidarily with the partnership for everything chargeable to the partnership:

1. For loss or injury caused to a third person or any penalty is incurred by reason of the wrongful act or omission of any partner acting in the ordinary course of business of the partnership or with the authority of his co-partners.
2. Where one partner acting within the scope of his apparent authority receives money or property of a third person and misapplies it.
3. Where the partnership in the course of business receives money or property of a third person and such money or property is misapplied by any partner while it is in custody of the partnership.

The four basic steps to partnership liquidation are:

1. Net income or loss up to the date of liquidation should be allocated to the partners' capital accounts based on their P&L ratio.
2. The gain or loss realized from the sale of noncash assets should be allocated to the partners' capital accounts based on their P&L ratio.
3. Creditors' claims, including liquidation expenses or anticipated future claims should be paid.
4. Remaining cash is distributed to partners in accordance with the balance in their capital accounts, and **not** the P&L ratio.

It should be noted that when loans exist between the partnership and a partner, the capital account and the loan/s are combined (right of offset). When a deficit exists and the deficient partner is insolvent, the amount of the deficit is allocated to the remaining solvent partners' capital accounts on the basis of their P&L ratio. Note that if the partner with the deficit is personally solvent, he has a liability to the remaining partners for the amount of the deficit.

A partnership may be liquidated by either

1. lump-sum liquidation; or,
2. liquidation by installment.

Lump-sum Liquidation

A lump-sum liquidation is one in which all of the assets are sold in bulk and all of the creditors' claims are satisfied before a single liquidating distribution is made to the partners. Because the assets are sold in bulk, there is a tendency to realize greater losses than if the assets were sold over a period of time.

Installment Liquidation

Under this form of liquidation, the assets are sold over a period of time and the cash is distributed to the partners as it becomes available. There are two keys to prepare a statement of partnership liquidation under the installment liquidation, namely:

1. Determination of the Available Cash Balance.

   The beginning cash balance, which is the balance before liquidation, is adjusted for the cash receipts from receivables, sale of noncash assets, payments to creditors, and liquidation expenses incurred. A situation may occur where a certain amount of cash is to be reserved for payment of future liabilities that may arise. If so, this cash should be treated as a non-cash assets which makes it unavailable for current distribution to the partners.

2. Determination of which Partner will Receive the Available Cash.

   There are a number of ways to make this computation, all of which are equally correct in the eyes of the examiners. This determination can be made at the beginning of the liquidation process (Cash Priority Program) or at the time of each payment (Schedule of Safe Payment).

Cash Priority Program

It is in installment distribution plan prepared before the actual liquidation, which permits the partners to determine how cash should be distributed safely if and when it becomes available. Under this program, to determine the order of distributions and amount of payments (per priority), the loss absorption balance of each partner must be computed. The loss absorption balance is the maximum loss each partner can absorb and which can eliminate him from any cash distribution.

Schedule of Safe Payment

It is a schedule of installment payment of cash to partners prepared periodically as if no more cash is forthcoming. Under this schedule, cash is distributed to a partner only if he has an excess credit balance

in his partnership interest after absorption of his share of the maximum possible loss (total value of unsold noncash assets plus cash withheld for payment of future obligations) that may occur.

INCORPORATION OF A PARTNERSHIP

The incorporation of a partnership results in the formation of a new accounting and legal entity, which means the adjustments of the partnership records up to the date of incorporation. The partnership closes its books and recognizes any income or loss up to the date of incorporation, and the books of the partnership are adjusted to reflect the fair market value of the partnership assets and the present value of the partnership liabilities; accordingly, adjustment is made to the capital accounts in accordance with the partners profit & loss ratio. Finally, common stock is distributed to the partners in accordance with the amounts in their capital accounts.

MULTIPLE CHOICE – Theory of Accounts

TOA 1-1 (AICPA)

Which of the following is not a characteristic of most partnership?

a. Limited liability
b. Limited life
c. Mutual agency
d. Ease of formation

TOA 1-2 (AICPA)

Which of the following is not a characteristic of the proprietary theory that influences accounting for partnerships?

a. Partners' salaries are viewed as a distribution of income rather than a component of net income.
b. A partnership is not viewed as separate entity, distinct, taxable entity.
c. A partnership is characterized by limited liability.
d. Changes in the ownership structure of a partnership result in the dissolution of the partnership.

TOA 1-3 (AICPA)

An advantage of the partnership as a form of business organization would be

a. Partners do not pay income taxes on their share in partnership income.
b. A partnership is bound by the act of the partners.
c. A partnership is created by mere agreements of the partners.
d. A partnership may be terminated by the death or withdrawal of a partner.

TOA 1-4 (AICPA)

Which of the following statements is correct with respect to a limited partnership?

a. A limited partner may not be an unsecured creditor of the limited partnership.
b. A general partner may not also be limited partner at the same time.
c. A general partner may be a secured creditor of the limited partnership.
d. A limited partnership can be formed with limited liability for all partners.

TOA 1-5 (Adapted)

A and B formed a partnership, each contributing non-cash assets into the partnership. Partner A contributed inventory with a current market value in excess of its carrying amount. Partner B contributed fixed asset with a carrying amount in excess of its current market value. At what amount should the partnership record each of the assets contributed?

	Inventory	Fixed asset
a.	Carrying amount	Market value
b.	Market value	Carrying amount
c.	Carrying amount	Carrying amount
d.	Market value	Market value

TOA 1-6 (Adapted)

Partnership capital and drawings accounts are similar to the corporate
a. Paid in capital, retained earnings, and dividends accounts.
b. Retained earnings account.
c. Paid in capital and retained earnings accounts.
d. Preferred and common stock accounts.

TOA 1-7 (AICPA)

When property other than cash is invested in a partnership, at what amount should the noncash property be credited to the contributing partner's capital account?
a. Fair value at the date of contribution.
b. Contributing partner's original cost.
c. Assessed valuation for property tax purposes.
d. Contributing partner's tax basis.

TOA 1-8 (Adapted)

If the partnership agreement does not specify how income is to be allocated, profits and loss should be allocated

a. Equally.
b. In proportion to the weighted average of capital invested during the period.
c. Equitably so that partners are compensated for the time and effort expended on behalf of the partnership.
d. In accordance with their capital contribution.

TOA 1-9 (Adapted)

Which of the following is not a component of the formula used to distribute income?

a. Salary allocation to those partners working.
b. After all other allocation, the remainder divided according to the profit and loss sharing ratio.
c. Interest on the average capital investments.
d. Interest on notes to partners.

TOA 1-10 (Adapted)

Which of the following is not considered a legitimate expense of a partnership?

a. Interest paid to partners based on the amount of invested capital.
b. Depreciation on assets contributed to the partnership by partners.
c. Salaries for management hired to run the business.
d. Supplies used in the partners' offices.

TOA 1-11 (AICPA)

The fact that salaries paid to partners are not a component of partnership income is indicative of

a. A departure from generally accepted accounting principles.
b. Being characteristic of the entity theory.
c. Being characteristic of the proprietary theory.
d. Why partnerships are characterized by unlimited liability.

TOA 1-12 (AICPA)

The Flat and Iron partnership agreement provides for Flat to receive a 20% bonus on profits before bonus. Remaining profits and losses are divided between Flat and Iron in the ratio of 2:3, respectively. Which partner has a greater advantage when the partnership has a profit or when it has a loss?

	Profit	Loss
a.	Flat	Iron
b.	Flat	Flat
c.	Iron	Flat
d.	Iron	Iron

TOA 1-13 (AICPA)

Which of the following results in dissolution of a partnership?

a. The contribution of additional assets to the partnership by an existing partner.
b. The receipt of a draw by an existing partner.
c. The winding up of the partnership and the distribution of remaining assets to the partners.
d. The withdrawal of a partner from a partnership.

TOA 1-14 (Adapted)

If a new partner acquires a partnership interest directly from the partners rather than from the partnership itself,

a. No entry is required.
b. The partnership assets should be revalued.
c. The existing partners' capital accounts should be reduced and the new partner's account increased.
d. The partnership has undergone a quasi-reorganization.

TOA 1-15 (AICPA)

Which of the following best characterizes the bonus method of recording a new partner's investment in a partnership?

a. Net assets of the previous partnership are not revalued.

b. The new partner's initial capital balance is equal to his or her investment.
c. Assuming that recorded assets are properly valued, the book value of the new partnership is equal to the book value of the previous partnership and the investment of the new partner.
d. The bonus always results in an increase to the previous partners' capital balances.

TOA 1-16 (AICPA)

The following is the priority sequence in which liquidation proceeds will be distributed for a partnership:

a. Partnership drawings, partnership liabilities, partnership loans, partnership capital balances
b. Partnership liabilities, partnership loans, partnership capital balances.
c. Partnership liabilities, partnership loans, partnership drawings, partnership capital balances.
d. Partnership liabilities, partnership capital balances, partnership loans.

TOA 1-17 (Adapted)

In a partnership liquidation, the final cash payment to the partners should be made in accordance with the

a. Partner's profit and loss sharing ratio.
b. Balances of partners' capital accounts.
c. Ratio of the capital contributions by partners.
d. Safe payment computations.

TOA 1-18 (AICPA)

The doctrine of marshaling of assets

a. Is applicable only if the partnership is insolvent.
b. Allows partners to first contribute personal assets to unsatisfied partnership creditors.
c. Is applicable if either the partnership is insolvent or individual partners are insolvent.
d. Amount owed to personal creditors and to the partnership for debit capital balances are shared proportionately from the personal assets of the partners.

TOA 1-19 (Adapted)

In the liquidation of a partnership it is necessary to (1.) distribute cash to the partners; (2.) sell non-cash assets; (3.) allocate any gain or loss on realization to the partners; and (4.) pay liabilities. These steps should be performed in the following order:

a. (2), (3), (4), (1)
b. (2), (3), (1), (4)
c. (3), (2), (1), (4)
d. (3), (2), (4), (1)

TOA 1-20 (Adapted)

In accounting for the lump-sum liquidation of a partnership, cash payments to partners after all non-partner creditors' claims have been satisfied, but before the final cash distribution, should be according to

a. The partners' relative profit and loss sharing ratio.
b. The final balances in partner capital accounts.
c. The partners' relative share of the gain or loss on liquidation.
d. Safe payment computations.

MULTIPLE CHOICE – Problems

PROB. 1-1 (Adapted)

On April 30, 2020, Al, Ben, and Ces formed a partnership by combining their separate business proprietorships. Al contributed cash of P50,000. Ben contributed property with a P36,000 carrying amount, a P40,000 original cost, and P80,000 fair value. The partnership accepted responsibility for the P35,000 mortgage attached to the property. Ces contributed equipment with a P30,000 carrying amount, a P75,000 original cost, and P55,000 fair value. The partnership agreement specifies that profits and losses are to be shared equally but is silent regarding capital contributions. Which partner has the largest capital account balance at April 30, 2020?

a. Al
b. Ben
c. Ces
d. All capital balances are equal

PROB. 1-2 (Adapted)

Al, Sharif, and Booba formed a partnership. Al will contribute cash of P50,000 and his store equipment that originally cost P60,000 with a second-hand value of P25,000. Sharif will contribute P80,000 in cash. Booba, whose family sells computers, will contribute P25,000 cash and a brand new computer that cost his family's computer dealership P50,000 but with a regular selling price of P60,000. They agreed to share profits and losses equally. Upon formation, what are the capital balances of the partners?

	Al	Sharif	Booba
a.	75,000	80,000	85,000
b.	80,000	80,000	80,000
c.	88,333	88,333	88,334
d.	110,000	80,000	75,000

PROB. 1-3 (Adapted)

On January 1, 2020, Atta and Boy agreed to form a partnership contributing their respective assets and equities subject to adjustments. On that date, the following were provided:

	Atta	Boy
Cash	P 28,000	P 62,000
Accounts receivable	200,000	600,000
Inventories	120,000	200,000
Land	600,000	
Building		500,000
Furniture & fixtures	50,000	35,000
Intangible assets	2,000	3,000
Accounts payable	180,000	250,000
Other liabilities	200,000	350,000
Capital	620,000	800,000

The following adjustments were agreed upon:

a. Accounts receivable of P20,000 and P40,000 are uncollectible in Atta's and Boy's respective books.
b. Inventories of P6,000 and P7,000 are worthless in Atta's and Boy's respective books.
c. Intangible assets are to be written off in both books.

What will be the capital balances of the partners after adjustments?

	Atta	Boy
a.	592,000	750,000
b.	600,000	700,000
c.	592,000	756,300
d.	600,000	750,000

PROB. 1-4 (Adapted)

Mary admits Jane as a partner in the business. Balance sheet accounts of Mary just before the admission of Jane show: Cash, P26,000, Accounts receivable, P120,000, Merchandise inventory, P180,000, and Accounts payable, P62,000. It was agreed that for purposes of establishing Mary's interest, the following adjustments be made: 1.) an allowance for doubtful accounts of 3% of accounts receivable is to be established; 2.) merchandise inventory is to be adjusted

upward by P25,000; and 3.) prepaid expenses of P3,600 and accrued liabilities of P4,000 are to be recognized.

If Jane is to invest sufficient cash to obtain 2/5 interest in the partnership, how much would Jane contribute to the new partnership?

a. 176,000
b. 190,000
c. 95,000
d. 113,980

PROB. 1-5 (AICPA)

Roberts and Smith drafted a partnership agreement that lists the following assets contributed at the partnership's formation:

	Contributed by	
	Roberts	Smith
Cash	P20,000	P30,000
Inventory		15,000
Building		40,000
Furniture & equipment	15,000	

The building is subject to a mortgage of P10,000, which the partnership has assumed. The partnership agreement also specifies that profits and losses are to be distributed evenly. What amounts should be recorded as capital for Roberts and Smith at the formation of the partnership?

	Roberts	Smith
a.	35,000	85,000
b.	35,000	75,000
c.	55,000	55,000
d.	60,000	60,000

PROB. 1-6 (AICPA)

On May 1, 2020, Cobb and Mott formed a partnership and agreed to share profits and losses in the ratio of 3:7, respectively. Cobb contributed a parcel of land that cost him P10,000. Mott contributed P40,000 cash. The land was sold for P18,000

on May 1, 2020, immediately after formation of the partnership. What amount should be recorded in Cobb's capital account on formation of the partnership?

a. 18,000
b. 17,400
c. 15,000
d. 10,000

PROB. 1-7 (Adapted)

On April 30, 2020, Alex, Benjie, and Cesar formed a partnership by combining their separate business proprietorships. Alex contributed cash of P500,000. Benjie contributed property with a P360,000 carrying amount, a P400,000 original cost, and P800,000 fair market value. The partnership accepted responsibility for the P350,000 mortgage attached to the property. Cesar contributed equipment with a P300,000 carrying amount, a P750,000 original cost, and P550,000 fair value. The partnership agreement specifies that profits and losses are to be shared equally but is silent regarding capital contributions. What are the capital balances of the partners at April 30, 2020?

	Alex	Benjie	Cesar
a.	500,000	800,000	550,000
b.	500,000	450,000	550,000
c.	500,000	360,000	300,000
d.	500,000	400,000	750,000

PROB. 1-8 (AICPA)

Abel and Carr formed a partnership and agreed to divide initial capital equally, even though Abel contributed P100,000 and Carr contributed P84,000 in identifiable assets. Under the bonus approach to adjust the capital accounts, Carr's unidentifiable asset should be debited for

a. 46,000
b. 16,000
c. 8,000
d. 0

PROB. 1-9 (AICPA)

The Grey and Redd Partnership was formed on January 2, 2020, Under the partnership agreement, each partner has an equal initial capital balance. Partnership net income or loss is allocated 60% to Grey and 40% to Redd. To form the partnership, Grey originally contributed assets costing P30,000 with a fair value of P60,000 on January 2, 2020, and Redd contributed P20,000 cash. Drawings by the partners during 2020 totaled P3,000 by Grey and P9,000 by Redd. The partnership net income in 2020 was P25,000. What is the amount of bonus?

a. 20,000 bonus to Grey
b. 20,000 bonus to Redd
c. 40,000 bonus to Grey
d. 40,000 bonus to Redd

PROB. 1-10 (Author)

A, B and C decided to form ABC Partnership. It was agreed that A will contribute an equipment with assessed value of P100,000 with historical cost of P800,000 and accumulated depreciation of P600,000. B will contribute a land and building with book value of P1,200,000 and fair market value of P1,500,000. The land and building is subject to a mortgage payable amounting to P300,000 to be assumed by the partnership.

The partners agreed that B will have 60% capital interest in the partnership. They agreed that C will contribute sufficient cash to the partnership. A day after the partnership formation, the equipment was sold for P 300,000.

a. What is the total agreed capitalization of the ABC Partnership?
   a. 1,500,000
   b. 2,000,000
   c. 2,500,000
   d. 3,000,000

b. What is the capital credit of A in the ABC Partnership after the formation?
   a. 100,000
   b. 200,000
   c. 300,000
   d. 400,000

c. What is the capital credit of B in the ABC Partnership after the formation?
   a. 900,000
   b. 1,500,000
   c. 1,400,000
   d. 1,200,000

d. What is the cash to be contributed by C in the ABC Partnership?
   a. 500,000
   b. 600,000
   c. 700,000
   d. 800,000

PROB. 1-11 (AICPA)

A partnership has the following accounting amounts:

Sales	P 700,000
Cost of goods sold	400,000
Operating expenses	100,000
Salary allocations to partners	130,000
Interest paid to banks	20,000
Partners' drawings	80,000

What is the partnership net income (loss)?
   a. 200,000
   b. 180,000
   c. 50,000
   d. (30,000)

PROB. 1-12 (Adapted)

Partners A and B share profits and losses equally after each has been credited in all circumstances with annual salary allowances of P30,000 and P24,000, respectively. Based on this agreement, in which of the following circumstances will Partner A benefit by P6,000 more than Partner B?
   a. Only if the partnership has net income of P54,000 or more for the year.
   b. Only if the partnership does not incur a loss for the year.
   c. In all earnings or loss situation.
   d. Only if the partnership has earnings of at least P6,000 for the year.

PROB. 1-13 (AICPA)

The ABC Partnership reports net income of P60,000. If Partners A, B, and C have income ratio of 50%, 30%, and 20%, respectively. What is the share of Partner C from the net income of the partnership, if he was given a capital ratio of 25%?

a. 30,000
b. 12,000
c. 18,000
d. 15,000

PROB. 1-14 (Adapted)

On January 2, 2020, Abel, Cain, and Josuah formed a partnership. Abel contributed cash of P100,000 and a delivery equipment that originally costs him P120,000, but with a second hand value of P50,000. Cain contributed P160,000 in cash. Josuah, whose family sells office equipment, contributed P50,000 in cash and office equipment that cost his family's dealership P100,000 but with a regular selling price of P120,000. In 2020, the partnership reported net income of P120,000. On December 31, 2020, what would be the capital balance of the partners?

	Abel	Cain	Josuah
a.	257,500	200,000	192,500
b.	190,000	200,000	210,000
c.	260,000	200,000	190,000
d.	187,500	200,000	212,500

PROB. 1-15 (AICPA)

The partnership agreement of Reid and Simm provides that interest at 10% per year is to be credited to each partner on the basis of weighted-average capital balances. A summary of Simm's capital account for the year-ended December 31, 2020, is as follows:

Balance, January 1	P 140,000
Additional investment, July 1	40,000
Withdrawal, August 1	(15,000)
Balance, December 31	165,000

What amount of interest should be credited to Simm's capital account for 2020?

a. 15,250
b. 15,375
c. 16,500
d. 17,250

PROB. 1-16 (AICPA)

Partner Ae first contributed P50,000 of capital into existing partnership on March 1, 2020. On June 1, 2020, said partner contributed another P20,000. On September 1, 2020, he withdrew P15,000 from the partnership. Withdrawal in excess of P10,000 are charged to the partner's capital accounts. What is the annual weighted average capital balance of Partner Ae?

a. 32,500
b. 51,667
c. 60,000
d. 48,333

PROB. 1-17 (RPCPA)

In the calendar year 2020, the partnership of A and B realized a net profit of P240,000. The capital accounts of the partners show the following postings:

	A, capital		B, capital	
	Debit	Credit	Debit	Credit
Jan. 1		P120,000		P80,000
May 1	P20,000		P10,000	
July 1				20,000
Aug. 1		10,000		
Oct. 1	10,000		5,000	

a. If the profits are to be divided based on average capital, the share of A and B, respectively are:

a. 129,600 110,400
b. 144,000 96,000
c. 136,800 103,200
d. 136,543 103,457

b. If 20% interest based on the capital at the end of the year is allowed and given and the balance of the P240,000 profit is divided equally, the total share of A and B, respectively are:

a.	121,500	118,500
b.	124,000	116,000
c.	123,000	117,000
d.	122,625	117,375

PROB. 1-18 (AICPA)

During 2020, Young and Zinc maintained average capital balances in their partnership of P160,000 and P100,000, respectively. The partners receive 10% interest on average capital balances, and residual profit or loss is divided equally. Partnership profit before interest was P4,000. By what amount should Zinc's capital account change for the year?

a. 1,000 decrease
b. 2,000 increase
c. 11,000 decrease
d. 12,000 increase

PROB. 1-19 (AICPA)

Red and White formed a partnership in 2020. The partnership agreement provides for annual salary allowances of P55,000 for Red and P45,000 for White. The partners share profits equally and losses in a 60/40 ratio. The partnership had earnings of P80,000 for 2020 before any allowance to partners. What amount of these earnings should be credited to each partner's capital account?

	Red	White
a.	40,000	40,000
b.	43,000	37,000
c.	44,000	36,000
d.	45,000	35,000

PROB. 1-20 (AICPA)

Fox, Greg, and Howe are partners with average capital balances during 2020 of P120,000, P60,000, and P40,000, respectively. Partners receive 10% interest on their average capital balances. After deducting salaries of P30,000 to Fox and

P20,000 to Howe, the residual profit and loss is divided equally. In 2020, the partnership sustained a P33,000 loss before interest and salaries to partners. By what amount should Fox's capital account change?

a. 7,000 increase
b. 11,000 decrease
c. 35,000 decrease
d. 42,000 increase

PROB. 1-21 (Adapted)

If a partnership has net income of P44,000 and Partner X is to be allocated bonus of 10% of income after the bonus. What is the amount of bonus Partner X will receive?

a. 3,000
b. 3,300
c. 4,000
d. 4,400

PROB. 1-22 (AICPA)

The partnership agreement of Donn, Eddy, and Farr provides for annual distribution of profit and loss in the following sequence:

- Donn, the managing partner, receives a bonus of 10% of profit.
- Each partner receives 6% interest on average capital investment.
- Residual profit or loss is divided equally.

Average capital investments for 2020 were:

Donn	P80,000
Eddy	50,000
Farr	30,000

What portion of the P100,000 partnership profit for 2020 should be allocated to Farr?

a. 28,600
b. 29,800
c. 35,133
d. 41,600

PROB. 1-23 (Adapted)

The Articles of Partnership of Adam and Eve the following provisions were stipulated:

a. Annual salary of P60,000 each.

b. Bonus to Adam of 20% of the net income after partners' salaries, the bonus being treated as an expense.

c. Balance to be divided equally.

The partnership reported a net income of P360,000 after partners' salaries but before bonus. How much is the share of Eve in the profit?

a. 60,000
b. 90,000
c. 150,000
d. 210,000

PROB. 1-24 (Adapted)

Partners AA and BB have profit and loss agreement with the following provisions: salaries of P30,000 and P45,000 for AA and BB, respectively; a bonus to AA of 10% of net income after salaries and bonus; and interest of 10% on average capital balances of P20,000 and P35,000 for AA and BB, respectively. One-third of any remaining profits will be allocated to AA and the balance to BB. If the partnership had net income of P102,500, how much should be allocated to Partner AA?

a. 44,250
b. 47,500
c. 41,000
d. 41,167

PROB. 1-25 (Adapted)

Partners AA and BB have profit and loss agreement with the following provisions: salaries of P30,000 and P45,000 for AA and BB, respectively; a bonus to AA of 10% of net income after salaries and bonus; and interest of 10% on average capital balances of P20,000 and P35,000 for AA and BB, respectively. One-third of any remaining profits will be allocated to AA and the balance to BB. If the partnership had net income of P22,000, how much should

be allocated to Partner AA, assuming that the provisions of the profit and loss agreement are ranked by order of priority starting with salaries?

a. 13,200
b. 12,500
c. 12,000
d. 8,800

PROB. 1-26 (Adapted)

Luz, Vi, and Minda are partners when the partnership earned a profit of P30,000. Their agreement provides the following regarding the allocation of profits and losses:

a. 8% interest on partners' ending capital in excess of P75,000.
b. Salaries of P20,000 for Luz and P30,000 for Vi.
c. Any balance is to be distributed 2:1:1 for Luz, Vi, and Minda, respectively.

Assume ending capital balances of P60,000, P80,000, and P100,000 for partners Luz, Vi, and Minda, respectively. What is the amount of profit allocated for Minda, if each provision of the profit and loss agreement is satisfied to whatever extent possible using the priority order shown above?

a. (3,600)
b. 3,600
c. (2,000)
d. 2,000

PROB. 1-27 (Adapted)

XYZ Partnership provided for the following in their distribution of profits and losses:

First: X to receive 10% of net income up to P100,000 and 20% of the amount in excess thereof.

Then: Y and Z are each to receive 5% of the remaining income in excess of P150,000 after X's share.

Finally: The balance is to be distributed equally to the three partners.

If the partnership earned a net income of P250,000, what is the total share of Partner X?

a. 100,000
b. 108,000
c. 110,000
d. 130,000

PROB. 1-28 (AICPA)

Hanz, Ivy, Jasper, and Kelly own a publishing company that they operate as a partnership. Their agreement includes the following:

- Hanz will receive a salary of P20,000 and a bonus of 3% of income after all the bonuses.
- Ivy will receive a salary of P10,000 and a bonus of 2% of income after all the bonuses.
- All partners are to receive the following: Hanz – P5,000; Ivy – P4,500; Jasper – P2,000; and Kelly – P4,700, representing 10% interest on their average capital balances.
- Any remaining profits are to be divided equally among the partners.

a. How would a net loss of P40,000 would be allocated among the partners?

	Hanz	Ivy	Jasper	Kelly
a.	3,261.75	(7,169.25)	(18,181.25)	(17,911.25)
b.	3,450.00	(7,050.00)	(19,550.00)	(16,850.00)
c.	4,116.75	(6,764.25)	(20,026.25)	(17,326.25)
d.	45,000.00	4,500.00	(8,000.00)	(5,300.00)

b. Assuming a profit of P40,000, how would this amount be distributed to them given the following order of priority: Interest on invested capital, then bonuses, then salary, and then according to profit and loss percentage?

	Hanz	Ivy	Jasper	Kelly
a.	23,261.75	12,830.75	1,818.75	2,088.75
b.	20,867.00	12,433.00	2,000.00	4,700.00
c.	20,740.00	12,560.00	2,000.00	4,700.00
d.	18,038.00	15,262.00	2,000.00	4,700.00

PROB. 1-29 (Adapted)

On October 31, 2020, Zita and Jones formed a partnership by investing cash of P300,000 and P200,000, respectively. The partners agreed to receive an annual salary allowance of P360,000, and to give Zita a bonus of 20% of the net income after partners' salaries, the bonus being treated as an expense.

If the profits after salaries and bonus are to be divided equally, and the profits on December 31, 2020 after partners' salaries but before bonus of Zita is P360,000, how much is the share of Zita in the profit?

a. 100,000
b. 120,000
c. 210,000
d. 270,000

PROB. 1-30 (AICPA)

Maxwell is trying to decide whether to accept a salary of P40,000 or salary of P25,000 plus a bonus of 10% of net income after salaries and bonus as a means of allocating profit among partners. Salaries traceable to the other partners are estimated to be P100,000. What amount of income would be necessary so that Maxwell would consider choices to be equal?

a. 165,000
b. 290,000
c. 265,000
d. 305,000

PROB. 1-31 (Adapted)

Alder, Benson, and Carl are capitalist partners and Denver, an industrial partner. The partnership reported a net loss of P100,000. How much is the share of Denver in the reported net loss?

a. 0
b. 10,000
c. 25,000
d. 100,000

PROB. 1-32 (AICPA)

Downs, Frey, and Vick formed the DFV general partnership to act as manufacturer's representatives. The partners agreed Downs would receive 40% of any partnership profits and Frey and Vick would each receive 30% of such profits. It was also agreed that the partnership would not terminate for 5 years. After the fourth year, the partners agreed to terminate the partnership. At that time, the partners capital accounts were as follows: Downs, P20,000; Frey, P15,000; and Vick P10,000. There also were undistributed losses of P30,000. Vick's share of the undistributed losses will be

a. 0
b. 1,000
c. 9,000
d. 10,000

PROB. 1-33 (AUTHOR)

On January 1, 2021, A, B and C formed ABC Partnership with total agreed capitalization of P1,000,000. The capital interest ratio of the ABC Partnership is 5:1:4 while the profit or loss ratio is 3:2:5, respectively for A, B and C. During 2021, A and B made additional investments of P200,000 and P500,000, respectively. At the end of 2021, B and C made drawings of P300,000 and P100,000, respectively. On December 31, 2021, the capital balance of B is reported at P200,000.

a. What is the net income or net loss of ABC Partnership for the year ended December 31, 2021?
   a. (500,000)
   b. (1,000,000)
   c. 800,000
   d. 1,200,000

b. What is the capital balance of A on December 31, 2021?
   a. 450,000
   b. 350,000
   c. 550,000
   d. 400,000

c. What is the capital balance of C on December 31, 2021?
   a. 150,000
   b. 50,000
   c. 200,000
   d. 250,000

PROB. 1-34 (AUTHOR)

On January 1, 2018, A, B and C formed ABC Partnership with original capital contribution of P300,000, P500,000 and P200,000. A is appointed as managing partner. During 2018, A, B and C made additional investments of P500,000, P200,000 and P300,000, respectively. At the end of 2018, A, B and C made drawings of P200,000, P100,000 and P400,000, respectively. At the end of 2018, the capital balance of C is reported at P320,000.

The profit or loss agreement of the partners is provided below:
- 10% interest on original capital contribution of the partners.
- Quarterly salary of P40,000 and P10,000 for A and B, respectively.
- Bonus to A equivalent to 20% of Net Income after interest and salary to all partners
- Remainder is to be distributed equally among the partners.

a. What is C's share in the partnership profit for the year ended December 31, 2018?
   a. 120,000
   b. 320,000
   c. 180,000
   d. 220,000

b. What is the partnership profit for the year ended December 31, 2018?
   a. 900,000
   b. 1,020,000
   c. 1,050,000
   d. 960,000

c. What is the bonus given to A as managing partner for the year ended December 31, 2018?
   a. 120,000
   b. 150,000

c. 60,000
d. 100,000

d. What is the capital balance of A on December 31, 2018?
   a. 1,140,000
   b. 1,110,000
   c. 1,050,000
   d. 1,200,000

e. What is the capital balance of B on December 31, 2018?
   a. 850,000
   b. 840,000
   c. 890,000
   d. 940,000

PROB. 1-35 (AICPA)

Blau and Rubi are partners who share profits and losses in the ratio of 6:4, respectively. On May 1, 2020, their respective capital accounts were as follows:

Blau	60,000
Rubi	50,000

On that date, Lind was admitted as a partner with one-third interest in capital, and profits for an investment of P40,000. The new partnership began with total capital of P150,000. Immediately after Lind's admission, Blau's capital should be

a. 50,000
b. 54,000
c. 56,667
d. 60,000

PROB. 1–36 (AICPA)

Partnership A has an existing capital of P70,000. Two partners currently own the partnership and split profits 50/50. A new partner is to be admitted and will contribute net assets with a fair value of P90,000. For no bonus to be recognized, what is the interest in the partnership granted the new partner?

a. 33.33%
b. 50.00%

c. 56.25%
d. 75.00%

PROB. 1-37 (AICPA)

Ranken purchases 50% of Lark's capital interest in the K and L partnership for P22,000. If the capital balances of Kim and Lark are P40,000 and P30,000, respectively, Ranken's capital balance following the purchase is

a. 22,000
b. 35,000
c. 20,000
d. 15,000

PROB. 1-38 (Adapted)

The following information pertains to ABC Partnership of Amor, Bing, and Cora:

Amor, capital (20%)	P 200,000
Bing, capital (30%)	200,000
Cora, capital (50%)	300,000

On this date, the partners agreed to admit Dolly into the partnership. Assuming Dolly purchased fifty percent of the partners' capital and pays P500,000 to the old partners, how would this amount be distributed to them?

a.	100,000	150,000	250,000
b.	130,000	145,000	225,000
c.	166,667	166,667	166,666
d.	150,000	150,000	200,000

PROB. 1-39 (AICPA)

The following balance sheet is presented for the partnership of A, B, and C, who share profits and losses in the respectively ratio of 5:3:2.

Assets		Liabilities and Capital	
Cash	120,000	Liabilities	280,000
Other assets	1,080,000	A, capital	560,000
		B, capital	320,000
		C, capital	40,000
Total	1,200,000	Total	1,200,000

Assume that the assets and liabilities are fairly valued on the balance sheet, and the partnership decided to admit D as a new partner with a one-fifth interest and no bonus is to be recorded. How much should D contribute in cash or other assets?

a. 147,200
b. 184,000
c. 230,000
d. 240,000

PROB. 1-40 (Adapted)

The capital balances in DEA Partnership are: D, capital P60,000; E, capital P50,000; and A, capital P40,000 and income ratios are: 5:3:2, respectively. The DEAR Partnership is formed by admitting R to the firm with cash investment of P60,000 for a 25% interest in capital. What is the amount of bonus to be credited to A capital in admitting R?

a. 10,000
b. 7,500
c. 3,750
d. 1,500

PROB. 1-41 (Adapted)

On October 31, 2020, Morris retired from the partnership of Morris, Philip, and Marl. Morris received P55,000 representing final settlement of his interest in the amount of P50,000. Under the bonus method,

a. P5,000 was recorded as goodwill.
b. P5,000 was recorded as expense.
c. Charged P5,000 against the capital balances of Philip and Marl.
d. P55,000 was recorded as bonus.

PROB. 1-42 (Adapted)

In May 2020, Imelda, a partner of an accounting firm, decided to withdraw when the partners' capital balances were: Mikee, P600,000; Raul, P600,000; and Imelda, P400,000. It was agreed that Imelda is to take the partnership's fully depreciated computer with a second-hand value of P24,000 that cost the

partnership P36,000. If profits and losses are shared equally, what would be the capital balances of the remaining partners after the retirement of Imelda?

	Mikee	Raul
a.	600,000	600,000
b.	592,000	592,000
c.	608,000	608,000
d.	612,000	612,000

PROB. 1-43 (Adapted)

Penny, Naty, and Mary are partners and share profits and losses equally. Each has a capital balancer of P1,800,000. Naty retires from the partnership and receives P1,500,000. Taking the partnership assets to be fairly stated, the entry to record Naty's retirement is

a.	Naty, capital	1,800,000 (dr)
	Goodwill	300,000 (cr)
	Cash	1,500,000 (cr)
b.	Naty, capital	1,800,000 (dr)
	Partnership assets	300,000 (cr)
	Cash	1,500,000 (cr)
c.	Naty, capital	1,500,000 (dr)
	Cash	1,500,000 (cr)
d.	Naty, capital	1,800,000 (dr)
	Mary, capital	150,000 (cr)
	Penny, capital	150,000 (cr)
	Cash	1,500,000 (cr)

PROB. 1-44 (AICPA)

On June 30, 2020, the balance sheet for the partnership of Coll, Maduro, and Prieto, together with their respective profit and loss ratios, were as follows:

Assets, at cost	180,000
Coll, loan	9,000
Coll, capital (20%)	42,000
Maduro, capital (20%)	39,000
Prieto, capital (60%)	90,000
Total	180,000

Coll decided to retire from the partnership. By mutual agreement, the assets are to be adjusted to their fair value of P216,000 at June 30, 2020. It was agreed that the partnership would pay Coll P61,200 cash for Coll's partnership interest, including Coll's loan which is to be repaid in full. After Coll's retirement, what is the balance of Maduro's capital account?

a. 36,450
b. 39,000
c. 45,450
d. 46,200

PROB. 1–45 (Adapted)

Peter, Queen, and Roy are partners with capital balances of P300,000, P300,000, and P200,000, respectively; and sharing profits and losses equally. Roy is to retire and it is agreed that he is to take certain office equipment with second hand value of P50,000 and a note for his interest. The office equipment carried in the books at P65,000 but brand new would cost P80,000. Roy's acquisition of the office equipment would result in

a. Reduction in capital of P5,000 each for Peter, Queen, and Roy.
b. Reduction in capital of P7,5000 each for Peter, Queen, and Roy.
c. Reduction in capital of P15,000 for Roy.
d. Reduction in capital of P55,000 for Roy.

PROB. 1-46 (AUTHOR)

On December 31, 2020, the Statement of Financial Position of ABC Partnership provided the following data with profit or loss ratio of 1:6:3:

Cash	P 1,000,000	Total Liabilities	P 600,000
Non-current asset	2,000,000	A, capital	900,000
		B, capital	800,000
		C, capital	700,000

On January 1, 2021, D is admitted to the partnership by purchasing 40% of the capital interest of B at a price of P500,000.

What is the capital balance of B after the admission of D on January 1, 2021?

a. 540,000
b. 480,000

c. 420,000
d. 300,000

PROB. 1-47 (AUTHOR)

On December 31, 2020, the Statement of Financial Position of ABC Partnership provided the following data with profit or loss ratio of 1:6:3:

Cash	P 1,300,000	Total Liabilities	P 300,000
Non-current asset	2,000,000	A, capital	1,400,000
		B, capital	700,000
		C, capital	900,000

On January 1, 2021, D is admitted to the partnership by investing P1,000,000 to the partnership for 20% capital interest.

a. If the all the assets of the existing partnership are properly valued, what is the capital balance of C after the admission of D?
   a. 960,000
   b. 900,000
   c. 840,000
   d. 1,200,000

b. If an existing asset of ABC partnership is not properly valued, what is the capital balance of B after the admission of D?
   a. 820,000
   b. 1,300,000
   c. 960,000
   d. 780,000

PROB. 1-48 (AUTHOR)

On December 31, 2018, the Statement of Financial Position of ABC Partnership provided the following data with profit or loss ratio of 5:1:4:

Cash	P 1,500,000	Total Liabilities	P 500,000
Non-current asset	2,000,000	A, capital	1,100,000
		B, capital	1,200,000
		C, capital	700,000

On January 1, 2019, D is admitted to the partnership by investing P500,000 to the partnership for 10% capital interest. The total agreed capitalization of the new partnership is P3,000,000.

a. What is the share of A in the asset impairment?
   a. 120,000
   b. 80,000
   c. 150,000
   d. 250,000

b. What is the amount of bonus given by D to the existing partners?
   a. 200,000
   b. 300,000
   c. 100,000
   d. 150,000

c. What is the capital balance of D after his admission to the partnership?
   a. 500,000
   b. 300,000
   c. 350,000
   d. 400,000

d. What is the capital balance of C after the admission of D to the partnership?
   a. 580,000
   b. 820,000
   c. 500,000
   d. 780,000

PROB. 1-49 (AUTHOR)

On December 31, 2020, ABC Partnership's Statement of Financial Positions shows that A, B and C have capital balances of P500,000, P300,000 and P200,000 with profit or loss ratio of 1:3:6. On January 1, 2019, C retired from the partnership and received P350,000. At the time of C's retirement, an asset of the partnership is undervalued. What is the capital balance of A after the retirement of C?

a. 462,500
b. 537,500
c. 562,500
d. 525,000

PROB. 1-50 (AUTHOR)

On December 31, 2020, ABC Partnership's Statement of Financial Position shows that A, B and C have capital balances of P400,000, P300,000 and P100,000 with profit or loss ratio of 1:4:5. On January 1, 2021, C retired from the partnership and received P80,000. At the time of C's retirement, the assets and liabilities of the partnership are properly valued. What is the capital balance of B after the retirement of C?

a. 284,000
b. 308,000
c. 316,000
d. 320,000

PROB. 1-51 (RPCPA)

N, X, and Y are partners sharing profits and losses in the ratio of 4:3:3, respectively. The condensed balance sheet of NXY Partnership as of December 31, 2020 is:

Cash	P 50,000	Liabilities	P 40,000
Other assets	130,000	N, capital	60,000
		X, capital	40,000
		Y, capital	40,000
Total	P 180,000	Total	P 180,000

a. All the partners agree to admit Z as a 1/5 partner in the partnership without any bonus. Z shall contribute assets amounting to

a. 28,000
b. 10,000
c. 35,000
d. 60,000

b. The NXY Partnership is dissolved and liquidated by installments. The first realization of P40,000 cash is on the sale of other assets with book value of P80,000. After payment of the liabilities, the cash available is distributed to N, X, and Y, respectively as follows:

a.	36,000	27,000	27,000
b.	44,000	28,000	28,000
c.	16,000	12,000	12,000
d.	24,000	13,000	13,000

PROB. 1-52 (AICPA)

The following condensed balance sheet is presented for the partnership of Alfa and Beda, who share profits and losses in the ratio of 60:40, respectively:

Cash	45,000
Other assets	625,000
Beda, loan	30,000
	700,000
Accounts payable	120,000
Alfa, capital	348,000
Beda, capital	232,000
	700,000

a. The assets and liabilities are fairly valued on the balance sheet. Alfa and Beda decide to admit Capp as a new partner with a 20% interest. No bonus is to be recorded. What amount should Capp contribute in cash or other assets?
   a. 110,000
   b. 116,000
   c. 140,000
   d. 145,000

b. Instead of admitting a new partner, Alfa and Beda decide to liquidate the partnership. If the other assets are sold for P500,000, what amount of the available cash should be distributed to Alfa?
   a. 255,000
   b. 273,000
   c. 327,000
   d. 348,000

PROB. 1-53 (AICPA)

Cohen, Butler, and Davis are partners in a partnership and share profits and losses 50%, 30%, and 20%, respectively. The partners have agreed to liquidate the partnership and anticipate that liquidation expenses will total P14,000. Prior to the liquidation, the partnership balance sheet reflects the following book values:

Cash	21,000
Non-cash assets	248,000
Notes payable to Davis	32,000
Other liabilities	154,000
Cohen, capital	60,000
Butler, capital (deficit)	(10,000)
Davis, capital	33,000

Assuming that the actual liquidation expenses are P14,000 and that non-cash assets are sold for P218,000, how would the assets be distributed to partners if Butler has net personal assets of P8,500?

	Cohen	Butler	Davis
a.	15,500	-	-
b.	21,429	-	49,571
c.	30,650	-	53,260
d.	27,500	-	52,000

PROB. 1-54 (AICPA)

The following condensed balance sheet is presented for the partnership of Axel, Barr, and Cain, who share profits and losses in the ratio of 4:3:3, respectively:

Cash	P100,000
Other assets	300,000
Total	P400,000
Liabilities	P150,000
Axel, capital	40,000
Barr, capital	180,000
Cain, capital	30,000
Total	P400,000

The partners agreed to dissolve the partnership after selling the other asset for P200,000. Upon dissolution of the partnership, Axel should have received

a. 0
b. 40,000
c. 60,000
d. 70,000

PROB. 1-55 (Adapted)

Because of very unprofitable operations, partners Nal, Lou, and Gee decided to dissolve the partnership when their capital balances and profit and loss ratio were:

Nal, capital (30%)	P175,000
Lou, capital (20%)	125,000
Gee, capital (50%)	175,000
Total	P475,000

Upon liquidation, all of the partnership's assets are sold and sufficient cash is realized to pay all liabilities except one for P25,000. Gee is personally insolvent, but the others are capable of meeting any indebtedness of the firm. By what amount would the capital of Nal change?

a. 7,500 decrease
b. 150,000 decrease
c. 195,000 decrease
d. No change

PROB. 1-56 (RPCPA)

Peter and John, who share profits and losses equally, decided to liquidate their partnership when their net assets amounted to P260,000, and capital balances of P170,000 and P90,000, respectively. If the noncash assets were sold for amount equal to its book value, what amount of cash should Peter and John received?

	Peter	John
a.	130,000	130,000
b.	170,000	90,000
c.	180,000	80,000
d.	195,000	65,000

PROB. 1-57 (Adapted)

Sammy and Michael are partners of SM Partnership sharing profits and losses equally. They decided to terminate the partnership when their capital balances are: Sammy, P750,000; Michael, P500,000. At this time, the partnership owes Michael P200,000, as evidenced by a promissory note. Upon liquidation, cash of P300,000 becomes available for distribution to the partners. In the final cash distribution, what would be the respective share of Sammy and Michael?

	Sammy	Michael
a.	150,000	150,000
b.	175,000	125,000
c.	200,000	100,000
d.	275,000	25,000

PROB. 1-58 (AICPA)

The following condensed balance sheet is presented for the partnership of Smith and Jones, who share profits and losses in the ratio of 60:40, respectively:

Other assets	P 450,000
Smith, loan	20,000
	P 470,000
Accounts payable	P 120,000
Smith, capital	195,000
Jones, capital	155,000
	P 470,000

The partners decided to liquidate the partnership. If the other assets are sold for P385,000, what amount of the available cash should be distributed to Smith?

a. 136,000
b. 156,000
c. 159,000
d. 195,000

PROB. 1-59 (Adapted)

On December 31, 2020, the partners of MNP Partnership decided to liquidate their business. Immediately before liquidation, the following condensed balance sheet was prepared:

Cash	P 50,000	Liabilities	P375,000
Noncash assets	900,000	Nieva, loan	80,000
		Perez, loan	25,000
		Munoz, capital (50%)	312,500
		Nieva, capital (30%)	107,500
		Perez, capital (20%)	50,000
Total	P950,000	Total	P950,000

The noncash assets were sold for P400,000. Assuming Perez is the only solvent partners, what amount of additional cash will be invested by Perez? (rounded to the nearest peso)

a. 37,143
b. 25,000
c. 5,000
d. 0

PROB. 1-60 (RPCPA)

As of December 31, the books of AME Partnership showed capital balances of: A - P40,000; M - P25,000; and E - P5,000. The partners' profit and loss ratio was 3:2:1, respectively. The partners decided to dissolve and liquidate. They sold all the non-cash assets for P37,000 cash. After settlement of all liabilities amounting to P12,000, they still have P28,000 cash left for distribution.

a. The loss on the realization of the non-cash assets was
   a. 40,000
   b. 42,000
   c. 44,000
   d. 45,000

b. Assuming that any partner's capital debit balance is uncollectible, the share of A in the P28,000 cash for distribution would be
   a. 19,000
   b. 18,000
   c. 17,800
   d. 40,000

PROB. 1-61 (RPCPA)

The following balance sheet is presented for the partnership of A, B, and C, who share profits and losses in the respectively ratio of 5:3:2.

Assets		Liabilities and Capital	
Cash	120,000	Liabilities	280,000
Other assets	1,080,000	A, capital	560,000
		B, capital	320,000
		C, capital	40,000
Total	1,200,000	Total	1,200,000

Assume that the three partners decided to liquidate the partnership. If the other assets are sold for P800,000, how should the available cash be distributed to each partner?

	A	B	C
a.	280,000	320,000	40,000
b.	324,000	236,000	16,000
c.	410,000	230,000	0
d.	412,000	228,000	0

PROB. 1-62 (Author)

On December 31, 2019, the Statement of Financial Position of ABC Partnership with profit or loss ratio of 6:1:3 is presented as follows:

Cash	P 1,000,000	Total Liabilities	P 2,000,000
Receivable from A	500,000	Payable to B	1,000,000
Other non-cash asset	2,000,000	Payable to C	100,000
		A, capital	700,000
		B, capital	(650,000)
		C, capital	350,000

On January 1, 2020, the partners decided to liquidate the partnership. All partners are legally declared to be personally insolvent. The other noncash assets were sold for P1,500,000. Liquidation expenses amounting to P100,000 were incurred.

a. How much cash was received by B at the end of partnership liquidation?
   a. 250,000
   b. 150,000
   c. 290,000
   d. 270,000

b. How much cash was received by C at the end of partnership liquidation?
   a. 270,000
   b. 150,000
   c. 350,000
   d. 220,000

PROB. 1-63 (AUTHOR)

On December 31, 2019, the Statement of Financial Position of ABC Partnership with profit or loss ratio of 1:4:5 is presented as follows:

Cash	P 1,200,000	Total Liabilities	P 1,500,000
Non-cash asset	800,000	A, capital	150,000
		B, capital	300,000
		C, capital	50,000

On January 1, 2020, the partners decided to liquidate the partnership. All partners are legally declared to be personally insolvent. The other noncash assets were sold at a specific price. Liquidation expenses amounting to P50,000 were incurred. At the end of liquidation, A received P80,000.

a. What is the amount of cash received by B at the end of liquidation?
   a. 40,000
   b. 30,000
   c. 10,000
   d. 20,000

b. What is the net proceeds from the sale of noncash asset during partnership liquidation?
   a. 450,000
   b. 350,000
   c. 400,000
   d. 500,000

PROB. 1-64 (RPCPA)

The condensed balance sheet of Alex, Jay, and John as of March 31, 2020 follows:

Cash	P 28,000	Liabilities	P 48,000
Other assets	265,000	Alex, capital	95,000
		Jay, capital	80,000
		John, capital	70,000
Total	P 293,000	Total	P 293,000

The income and loss ratios are 50:25:25, respectively. The partners voted to dissolve their partnership and liquidate by selling other assets in installments. P70,000 was realized on the first cash sale of other assets with a book value of P150,000. After settlement with creditors, all cash available was distributed to the partners. How much cash was received by John?

a. 10,500
b. 20,000
c. 21,250
d. 32,500

PROB. 1-65 (Adapted)

After incurring losses resulting from very unprofitable operations, the Goh Kong Wei Partnership decided to liquidate when the partners' capital balances were:

Goh, capital (40%)	P80,000
Kong, capital (40%)	130,000
Wei, capital (20%)	96,000

The non-cash assets were sold in installment. Available cash were distributed to partners in every sale of non-cash asset. After the second sale of non-cash assets, the partners received the same amount of cash in the distribution. And from the third sale of non-cash assets, cash available for distribution amounts to P28,000, and unsold non-cash assets has a book value of P12,500. Using cash priority program, what amount did Wei received in the third installment of cash?

a. 11,600
b. 8,000
c. 5,600
d. 0

PROB. 1-66 (AICPA)

Partners Able, Baker, and Chapman, who share profit and loss equally, have the following personal assets, personal liabilities, and partnership capital balances:

	Able	Baker	Chapman
Personal assets	P 30,000	P 80,000	P 60,000
Personal liabilities	25,000	50,000	72,000
Capital balances	50,000	(32,000)	70,000

After applying the doctrine of marshalling of assets, the capital balances of Able, Baker, and Chapman, respectively, would be

a.	50,000	(2,000)	58,000
b.	48,000	0	58,000
c.	49,000	0	57,000
d.	34,000	0	54,000

PROB. 1-67 (Adapted)

Partner Morgan is personally insolvent, owing P600,000. Personal assets will only bring P200,000 when liquidated. At the same time, Morgan has a credit capital balance in the partnership of P120,000. The capital amounts of the other partners total a credit balance of P250,000. Under the doctrine of marshalling of assets, how much the personal creditors of Morgan can collect?

a. 120,000
b. 200,000
c. 320,000
d. 570,000

PROB. 1-68 (RPCPA)

The balance sheet of the partnership of Salve, Galo, and Norma, who share in the profits and losses in the ratio of 5:3:2, respectively is as follows:

Assets		Liabilities and Capital	
Cash	30,000	Liabilities	50,000
Other assets	320,000	Salve, capital	80,000
		Galo, capital	115,000
		Norma, capital	105,000
Total	350,000	Total	350,000

The partnership is liquidated by installment. The first sale of non-cash assets with a book value of P150,000 realizes P100,000. How should the remaining cash be distributed?

	Salve	Galo	Norma
a.	50,000	30,000	20,000
b.	40,000	24,000	16,000
c.	0	31,000	49,000
d.	0	48,000	32,000

PROB. 1-69 (AICPA)

Partners Almond, Barney, and Colors have capital balances of P20,000, P50,000, and P90,000, respectively. They split profits in the ratio of 2:4:4, respectively. Under a safe cash distribution plan, one of the partners will get the following total amount in liquidation before any other partners get anything:

a. 0
b. 15,000
c. 40,000
d. 180,000

PROB. 1-70 (AICPA)

The ABC Partnership has assets with book value of P240,000 and a market value of P195,000, outside liabilities of P70,000, loans payable to Partner Able of P20,000, and capital balances for Partners Able, Baker, and Chapman of P70,000, P30,000, and P50,000, respectively. The partners share profits and losses equally.

a. How would the first P100,000 of available assets be distributed?
   a. P70,000 to outside liabilities, P20,000 to Able, and the balance equally among partners.
   b. P70,000 to outside liabilities, and P30,000 to Able.
   c. P70,000 to outside liabilities, P25,000 to Able, and P5,000 to Chapman.
   d. P40,000 to Able, P20,000 to Chapman, and the balance equally among partners.

b. If all outside creditors and loans to partners had been paid. How would the balance of the assets be distributed assuming Chapman had already received assets with a value of P30,000?
   a. Each of the partners would received P25,000.
   b. Each of the partners would received P40,000.
   c. Able: P70,000, Baker: P30,000, Chapman: P20,000
   d. Able: P55,000, Baker: P15,000, Chapman: P5,000.

PROB. 1-71 (AUTHOR)

On December 31, 2020, the Statement of Financial Position of ABC Partnership with profit or loss ratio of 5:3:2 is presented as follows:

Cash	P 1,600,000	Total Liabilities	P 2,000,000
Non-cash asset	1,400,000	A, capital	100,000
		B, capital	500,000
		C, capital	400,000

On January 1, 2021, the partners decided to liquidate the partnership in installment. All partners are legally declared to be personally insolvent.

As of January 31, 2021, the following transactions occurred:

- Noncash assets with a book value P1,000,000 were sold at a gain of P100,000.
- Liquidation expenses for the month of January amounting to P50,000 were paid.
- It is estimated that liquidation expenses amounting to P150,000 will be incurred for the month of February, 2021.
- 20% of the liabilities to third persons were settled.
- Available cash were distributed to the partners.

As of February 28, 2021, the following transactions occurred:

- Remaining noncash assets were sold at a loss of P100,000.
- The final liquidation expenses for the month of February amounted to P100,000.
- The remaining liabilities to third persons were settled at a compromise amount of P1,500,000.
- Remaining cash were finally distributed to the partners.

a. What is the amount of cash received by partner C on January 31, 2021?
   a. 260,000
   b. 240,000
   c. 300,000
   d. 350,000

b. What is the share of B in the maximum possible loss on January 31, 2021?
   a. 275,000
   b. 110,000

c. 120,000
d. 165,000

c. What is the amount of total cash withheld on January 31, 2021?
   a. 550,000
   b. 1,600,000
   c. 1,750,000
   d. 1,700,000

d. What is the amount of cash received by A on February 28, 2021?
   a. 75,000
   b. 25,000
   c. 50,000
   d. 0

PROB. 1-72 (RPCPA)

Roy and Gil are partners sharing profits and losses in the ratio of 1:2, respectively. On July 1, they decided to form the R&G Corporation by transferring the assets and liabilities of the partnership to the corporation in exchange for the latter's stock. The following is the post-closing trial balance of the partnership.

	Debit	Credit
Cash	P 45,000	
Accounts receivable (net)	60,000	
Inventory	90,000	
Fixed assets (net)	174,000	
Liabilities		P 60,000
Roy, capital		94,800
Gil, capital		214,200
	P369,000	P369,000

It was agreed that adjustments be made to the following assets to be transferred to the corporation:

Accounts receivable	P40,000
Inventory	68,000
Fixed assets	180,600

The R&G Corporation was authorized to issue P100 par preferred stock and P10 par common stock. Roy and Gil agreed to receive for their equity in the partnership 720 shares of the common stock each, plus even multiples of 10 shares of preferred stock for their remaining interests.

a. The total number of shares of preferred and common stocks issued by the corporation in exchange for the assets and liabilities of the partnership are:

	Preferred	Common
a.	2,540 shares	1,500 shares
b.	2,592 shares	1,440 shares
c.	2,642 shares	1,440 shares
d.	2.642 shares	1,550 shares

b. The distribution of the stocks to Roy and Gil would be:

	Roy		Gil	
	Preferred	Common	Preferred	Common
a.	785 shares	720 shares	1,384 shares	720 shares
b.	773 shares	750 shares	1,843 shares	750 shares
c.	758 shares	720 shares	1,834 shares	720 shares
d.	738 shares	720 shares	1,758 shares	720 shares

PROB. 1-73 (AICPA)

The condensed balance sheet of Adams & Gray, a partnership, at December 31, 2020, follows:

Current assets	P 250,000
Equipment (net)	30,000
Total assets	P 280,000
Liabilities	P 20,000
Adams, capital	160,000
Gray, capital	100,000
Total liabilities and capital	P 280,000

On December 31, 2020, the fair values of the assets and liabilities were appraised at P240,000 and P20,000, respectively, by an independent appraiser. On January 2, 2021, the partnership was incorporated and 1,000 shares of P5 par value common stock were issued.

Immediately after the incorporation, what amount should the new corporation report as additional paid in capital?

a. 275,000
b. 260,000
c. 215,000
d. 0

ANSWERS – Theory of Accounts

TOA 1-1 *Suggested answer (a) Limited liability*

In a partnership, each partner is personally and individually liable for all partnership liabilities. In other words, the liability of the partners in a partnership is unlimited.

TOA 1-2 *Suggested answer (c) A partnership is characterized by limited liability*

Partnerships have been affected by the proprietary theory, which looks at the entity through the eyes of the owners. Characteristics of a partnership that emphasizes that the entity is viewed as the individual owners include the following:

a. *Salaries to partners are viewed as distributions of income rather than a component of income;*
b. *Unlimited liability of general partners extends beyond the entity to the individual partners;*
c. *Income of the partnership is not taxed at the partnership level but rather than, is included as part of the partners' individual taxable income;*
d. *An original partnership is dissolved upon admission or withdrawal of a partner.*

TOA 1-3 *Suggested answer (c) A partnership is created by mere agreements of the partners*

A partnership is easily formed and is relatively free from governmental regulations and restrictions. Decisions can be made quickly on substantive matters affecting the firm, whereas in a corporation, formal meetings with the board of directors are often needed.

TOA 1-4 *Suggested answer (c) A general partner may be a secured creditor of the limited partnership*

A general partner has a voice in management and has unlimited personal liability. Anyone, including a secured creditor of the limited partnership, may be a general partner if he/she takes on these responsibilities.

Non-cash assets contributed into the partnership should be recorded at its current fair value.

TOA 1-6 *Suggested answer (a)*

Partnership capital accounts are similar to corporate paid in capital and retained earnings; while partnership drawing accounts are similar to corporate dividends accounts.

TOA 1-7 *Suggested answer (a) Fair value at the date of contribution*

Where a new legal entity exists, noncash assets are permitted to be recorded at its fair market value; thus, the capital account should be credited for the current fair value of the assets at the date of the contribution.

TOA 1-8 *Suggested answer (d) In accordance with capital contribution*

The ratio in which partnership profits and losses are divided is known as profit and loss ratio. Profits and losses are divided in accordance with the agreement of the partners. In the absence of any agreement, profits and losses are divided in accordance with the partners' contributed capital.

TOA 1-9 *Suggested answer (d)Interest on notes to partners*

The division of partnership income should be based on an analysis of the correlation between capital and labor committed to the firm by individual partners and the income that subsequently is generated. As a result, profits might be divided in one or more of the following ways: 1.) according to ratio; 2.) according to the capital investments of the partners; and 3.) according to the labor (or service) rendered by the partners. Interest on notes to partners is a legitimate expense of a partnership.

TOA 1-10 *Suggested answer (a) Interest paid to partners based on the amount of invested capital*

Again, the division of partnership income should be based on an analysis of the correlation between capital and labor committed to the firm by individual partners and the income that subsequently is generated and therefore includes interest paid to partners based on the amount of their invested capital.

TOA 1-11 *Suggested answer (c) Being characteristic of the proprietary theory*

Partnerships have been affected by the proprietary theory, which looks at the entity through the eyes of the owners. Characteristics of a partnership that emphasizes that the entity is viewed as the individual owners include the following:

a. *Salaries to partners are viewed as distributions of income rather than a component of income;*
b. *Unlimited liability of general partners extends beyond the entity to the individual partners;*
c. *Income of the partnership is not taxed at the partnership level but rather than, is included as part of the partners' individual taxable income;*
d. *An original partnership is dissolved upon admission or withdrawal of a partner.*

TOA 1-12 *Suggested answer (b) Flat Flat*

Profit (Flat)		Loss (Flat)	
Bonus	20%	Bonus	0
Balance (2/5 x 80%)	32%	P & L (2/5 x 100%)	40%
Total advantage	52%	Total advantage	40%

In case of profit Flat has 52%, an advantage, and in case of loss, its only 40%, also an advantage.

TOA 1-13 *Suggested answer (d) Withdrawal of a partner from a partnership*

Dissolution is the change in the relation of the partners caused by any partner ceasing to be associated in the carrying on as distinguished from the winding up of the business. Generally, a partnership is dissolved upon the death, withdrawal, admission, or bankruptcy of an individual partner (owner).

TOA 1-14 *Suggested answer (c) The existing partner's capital should be reduced and the new partner's account increased*

When a new partner deals directly with an existing partner or partners rather than with the partnership entity, the acquisition price is paid to the selling partner/s and not to the partnership itself. The partnership records the redistribution of capital interests by transferring all or a portion of the

seller's capital to the new partner's capital account but does not record the transfer of any asset or consideration.

TOA 1-15 *Suggested answer (c)Assuming that recorded assets are properly valued, the book value of the new partnership is equal to the book value of the previous partnership and the investment of the new partner.*

Under the bonus method, total contributed capital of the old and new partner is equal to the total agreed capital (total capital of the new partnership).

TOA 1-16 *Suggested answer (b) Partnership liabilities, partnership loans, partnership capital balances.*

In the event of liquidation, subject to any agreement to the contrary, the following sequence of payments should be observed:

1. *Amounts owed to creditors other than partners;*
2. *Amounts owed to partners other than for capital and profits (i.e. partners' loans to the partnership;*
3. *Amounts owed to partners as capital*
4. *Amounts owed to partners as profits not currently closed to partners' capital accounts.*

TOA 1-17 *Suggested answer (b) Balances of partners' capital accounts*

The four basic steps to partnership liquidation are:

1. *Net income or loss up to the date of liquidation should be allocated to the partners' capital accounts based on their P&L ratio.*
2. *The gain or loss realized from the sale of noncash assets should be allocated to the partners' capital accounts based on their P&L ratio.*
3. *Creditors' claims, including liquidation expenses or anticipated future claims should be paid.*
4. *Remaining cash is distributed to partners in accordance with the balance in their capital accounts, and* **not** *the P&L ratio.*

TOA 1-18 *Suggested answer (c) Is applicable if either the partnership is insolvent or individual partners are insolvent.*

The provisions that call for the contribution of personal assets to a liquidating partnership illustrate the characteristics of unlimited liability. However, such personal liability depends on the legal doctrine of marshaling

of assets. This doctrine, which is applied when the partnership and/or one or more of the partners are insolvent, states that:

a. *Partnership assets are first available for the payment of partnership debts. Any excess assets are available for payment of the individual partner's debts, but only to the extent of the partner's interest in the capital of the partnership;*
b. *Personal assets of a partner are applied against personal debts, ranked in the order of priority as follows: 1.) Amounts owed to personal creditors; 2.) Amounts owed to partnership creditors; and 3.) Amounts owed to partners by way of contribution.*

TOA 1-19 *Suggested answer (a) 2, 3, . 4, 1*

Unlike a dissolution where the partnership continues its business purpose, liquidation results in the partnership's ending or terminating its business. The process of liquidation consists of the conversion of partnership assets into a distributable form and the distribution of these assets to creditors and owners. All liquidation expenses and gains or losses from conversion of partnership assets also must be allocated to the partners before assets actually are distributed to the individual partners. Failure to consider these factors may result in the premature or incorrect distribution of assets to a partner.

TOA 1-20 *Suggested answer (d) Safe payment computations*

A lump-sum liquidation is one in which all of the assets are sold in bulk and all of the creditors' claims are satisfied before a single liquidating distribution is made to the partners. Because assets are sold in bulk, there is a tendency to realize greater losses than if the assets were sold over a period of time. Therefore, payments to partners should be distributed safely.

SOLUTIONS – Problems

PROB. 1-1 *Suggested answer: (c) Ces*

Al capital	50,000
Ben capital (80,000 – 35,000)	45,000
Ces capital	55,000

At the date of the formation of the partnership, all assets contributed by the partners are recorded in the books of the partnership at their fair values, and all liabilities assumed by the partnership are recorded at their present values.

PROB. 1-2 *Suggested answer (a) 75,000, 80,000, 85,000*

	Al	Sharif	Booba
Cash contribution	50,000	80,000	25,000
Store equipment	25,000		
Computer			60,000
Capital balances	75,000	80,000	85,000

Noncash assets contributed by the partners into the partnership should be recorded at its fair market values. In this case, the fair market value is the cash selling price of the computer and the second hand value of the store equipment.

PROB. 1-3 *Suggested answer: (a) 592,000 750,000*

	Atta	Boy
Capital balances before adjustments	620,000	800,000
a. Uncollectible accounts receivable	(20,000)	(40,000)
b. Worthless inventories	(6,000)	(7,000)
c. Intangible assets written off	(2,000)	(3,000)
Adjusted capital balances	592,000	750,000

When assets other than cash are invested into the partnership, it is necessary for the partners to agree upon the value of such assets. The assets are recorded in accordance with the agreement, and the partners' capital

accounts are credited for the amounts of the respective investments. The effects of the adjustments to the capital accounts should be in accordance with the accounting equation (Asset = Liabilities + Capital).

PROB. 1-4 *Suggested answer: (b)190,000*

Mary capital before adjustments	264,000
Allowance for doubtful accounts (3% x 120,000)	(3,600)
Merchandise inventory	25,000
Prepaid expenses	3,600
Accrued liabilities	(4,000)
Mary capital after adjustments	285,000
Total partnership capital (285,000/ 3/5)	475,000
Multiply by Jane interest	2/5
Cash to be invested by Jane	190,000

Again, when assets other than cash are invested into the partnership, it is necessary for the partners to agree upon the value of such assets. The assets are recorded in accordance with the agreement, and the partners' capital accounts are credited for the amounts of the respective investments. The effects of the adjustments to the capital accounts should be in accordance with the accounting equation (Asset = Liabilities + Capital)

In this case where Jane will have an interest of 2/5, Mary should have an interest of 3/5; thus, the adjusted capital of Mary represents her 3/5 interest, which will be used as basis to determine the total partnership capital.

PROB. 1-5 *Suggested answer (b) 35,000 75,000*

	Roberts	Smith
Cash	P 20,000	P 30,000
Inventory		15,000
Building (net of P10,000 mortgage)		30,000
Furniture & equipment	15,000	
	P 35,000	P 75,000

Generally, individual capital accounts should be credited for the fair market value , at the date of contribution, of the assets contributed by that partner. The partner's capital credit is based upon the net assets contributed by the particular partner, thus the liabilities assumed by the partnership reduced the fair market value of the building invested.

PROB. 1-6 *Suggested answer: (a)18,000*

The importance of proper valuation of assets invested by partners cannot be overemphasized. In order to achieve equity, assets invested by partners should be reported at their fair market value. Fair value is determined by making reference to the following: cash transactions of the same or similar assets, quoted market prices, and independent appraisals.

PROB. 1-7 *Suggested answer: (b)500,000 450,000 550,000*

	Alex	Benjie	Cesar
Contributions @ fair value	P500,000	P800,000	P550,000
Less liabilities assumed	-	350,000	-
Capital balance, 4/30/20	P500,000	P450,000	P550,000

Again, any noncash asset contributed into the partnership should be valued at the fair value of the noncash asset contributed. Any liabilities assumed by the partnership, reduces the partners' capital balance. As a general guideline, what is to be recorded as a credit to partners' capital is the fair value of the net assets contributed.

PROB. 1-8 *Suggested answer: (d) 0*

Under the bonus method, assets are not revalued, instead, adjustments are made to partnership capital accounts; consequently, unidentifiable assets are not recognized.

PROB. 1-9 *Suggested answer (b) 20,000 bonus to Redd*

	Contributed Capital	Agreed Capital	Increase (Decrease)
Grey	60,000	40,000	(20,000)
Redd	20,000	40,000	20,000
Total	80,000	80,000	

The partnership agreement provides for equal initial capital. Thus, under the bonus method, the capital credit for Redd should be the same as the contribution of Grey, resulting to P20,000 bonus from Grey to Redd.

PROB. 1-10

a. Suggested answer: (b) 2,000,000

Fair market value of land and building contributed by B	1,500,000
Less: Mortgage payable to be assumed by ABC partnership	300,000
Capital credit of B	1,200,000
Divided by B's capital ratio	60%
Total agreed capitalization of ABC partnership	2,000,000

b. Suggested answer: (c) 300,000

Capital credit of A (Proceeds from sale of equipment)	300,000

c. Suggested answer: (d) 1,200,000

Fair market value of land and building contributed by B	1,500,000
Less: Mortgage payable to be assumed by ABC partnership	300,000
Capital credit of B	1,200,000

d. Suggested answer: (a) 500,000

Total agreed capitalization of ABC partnership	2,000,000
Less: Total capital credit of A and B (300,000 + 1,200,000)	1,500,000
Cash to be contributed by C	500,000

PROB. 1-11 *Suggested answer: (b) 180,000*

Sales	700,000
Less cost of goods sold	400,000
Gross profit	300,000
Less operating expenses	100,000
Operating profit	200,000
Less interest paid to banks	20,000
Net income	180,000

Salaries, like interest on capital investments, are viewed as a means of allocating income rather than as an expense. The drawing account is a temporary account and is periodically closed to the partner's capital account, and has nothing to do with the computation of net income.

PROB. 1-12 *Suggested answer (c) In all earnings or loss situation*

When agreement provides for salaries without qualification, salary distribution must be made even though profit is inadequate to cover salaries or there is a loss. In this case, Partner A will benefit by P6,000 in all situations, whether there is a profit or loss.

PROB. 1-13 *Suggested answer (b) 12,000*

Partnership net income or net loss is shared based on capital contribution of the partners, unless the partnership contract specifically indicates otherwise. As a result, it is customary to refer to the basis as the income ratio, income and loss ratio, or the profit or loss ratio. Thus, the share of Partner C, should be P12,000 (60,000 x 20%).

PROB. 1-14 *Suggested answer (d)187,500 200,000 212,500*

	Abel	Cain	Josuah
Cash contributed	P100,000	P160,000	P 50,000
Noncash contributed	50,000		120,000
Capital balances beginning	150,000	160,000	170,000

Distribution of net income:			
(150/480 x 120,000)	37,500		
(160/480 x 120,000)		40,000	
(170/480 x 120,000)			42,500
Capital balances, 12/31/16	P187,500	P200,000	P212,500

Noncash assets contributed by partners to form a partnership should be recorded at its fair value. Profits and losses are divided in accordance with the agreement of the partners, normally, the profit and loss ratio. In the absence of any agreement, profits and losses are divided in accordance with the partners' contributed capital.

PROB. 1-15 *Suggested answer: (b) 15,375*

Date	Balances	Months Unchanged	Total
January 1	P140,000	6	P 840,000
July 1	180,000	1	180,000
August 1	165,000	5	825,000
Total		12	P1,845,000

Weighted average capital (1,845,000/ 12 months)	P153,750
Interest rate	10%
Interest to be credited to Simm	P 15,375

When partners wish to distribute profits in terms of relative investments, the use of average capitals, which provides for the recognition of capital changes during the period, normally offers the most equitable method. From the data given above, partner's investments were expressed in terms of peso-month. Under this method (peso-day, peso-month), withdrawals and investments made during the first half of the month should be treated as if they were made on the first day of the month, while withdrawals and investments made during the later half of the month should be treated as if they were made on the first day of the following month.

PROB. 1-16 *Suggested answer (b) 51,667*

Date	Balances	Months Unchanged	Total
March 1	P 50,000	3	P 150,000
June 1	70,000	3	210,000
September 1	65,000	4	260,000
Total		12	P 620,000

Annual weighted average capital (P620,000/ 12) P 51,667

The partnership agreement should provide how invested capital is to be determined. Since each partner's equity is a combination of capital and drawing account balances, partner's drawings may be offset against their respective capital accounts for purposes of allocating income based on invested capital. However, the agreement may also provide that only withdrawals ***more than a certain limit*** *are to be viewed as offset against capital balances. Thus, only P5,000 excess of P10,000 limit is viewed as deduction from the capital balance.*

PROB. 1-17

a. *Suggested answer: (d) 136,543 103,457*

A, capital:

Date	Balances	Months Unchanged	Total
January 1	P120,000	4	P 480,000
May 1	100,000	3	300,000
Aug. 1	110,000	2	220,000
Oct. 1	100,000	3	300,000
Total		12	P1,300,000

Average capital - A = P1,300,000/12 = P108,333

B, capital:

Date	Balances	Months Unchanged	Total
January 1	P80,000	4	P320,000
May 1	70,000	2	140,000
July 1	90,000	3	270,000
Oct. 1	85,000	3	255,000
Total		12	P985,000

Average capital - B = P985,000/12 = P82,083

A	P240,000 x (108,333/190,417)	P136,543
B	240,000 x (82,083/190,417)	103,457
Total		P240,000

Again, under this method (peso-day, peso-month), withdrawals and investments made during the first half of the month should be treated as if they were made on the first day of the month, while withdrawals and investments made during the latter half of the month should be treated as if they were made on the first day of the following month.

b. *Suggested answer: (a) 121,500 118,500*

	A	B	Total
Interest on ending capital			
(100,000 x 20%)	P 20,000		
(85,000 x 20%)		P 17,000	P 37,000
Balance (equally)	101,500	101,500	203,000
Total	P121,500	P118,500	P240,000

The capital contributions to be considered as the basis for the distribution of profits and losses should be clearly defined in the agreement, because it may be based on the original capital contribution, on the capitals at the beginning of each period, on the capitals at the end of each period, or on the average capitals during the period

PROB. 1-18 *Suggested answer: (a) 1,000 decrease*

	Young	Zinc	Total
10% interest on ave. capital:			
(10% x 160,000)	P16,000		
(10% x 100,000)		P10,000	P26,000
Balance (equally)	(11,000)	(11,000)	(22,000)
Total	P 5,000	(P1,000)	P 4,000

The partnership profit before interest was P4,000, however, it resulted to a loss of P22,000 after interest. Thus, the capital balance of Zinc decreases by P1,000.

PROB. 1-19 *Suggested answer: (b) 43,000 37,000*

	Red	White	Total
Salary allowances	55,000	45,000	100,000
Loss after allowances (60:40)	(12,000)	(8,000)	(20,000)
Earnings credited to partners	43,000	37,000	80,000

The earnings before any allowance of P80,000 is reduced by the salary allowances in the total amount of P100,000 which resulted to a loss after allowances of P20,000, because credits to partners' capital accounts are based on earnings after allowances (e.g. interest, salary, and bonus). It should be pointed out that per partnership agreement profits should be shared equally and losses in a 60/40 ratio, thus the loss of P20,000 was shared at 60/40 ratio.

PROB. 1-20 *Suggested answer: (a) 7,000 increase*

	Fox	Greg	Howe	Total
10% interest on average capital	12,000	6,000	4,000	22,000
Salaries	30,000		20,000	50,000
Bal. (equally)	(35,000)	(35,000)	(35,000)	(105,000)
Total inc.(dec.)	7,000	(29,000)	(11,000)	(33,000)

*Again, when the partnership agreement provides without qualification that interest is to be **allowed on investment**, interest must be allowed even though operations have resulted in earnings that are less than the allowable interest or in a loss.*

And when agreement also provides for salaries without qualification, salary distribution must be made even though profit is inadequate to cover salaries or there is a loss. Interest and salary allowances allocated to partners increase their capital balances as well as the amount of loss. Accordingly, the amount of loss will reduce the partners' capital accounts. The resulting loss in the total amount of P105,000 after the interest and salary allowances

was allocated among partners equally based on their agreement, that profit and loss is divided equally.

PROB. 1-21 *Suggested answer (c) 4,000*

Net income before bonus	44,000
Less net income after bonus (44,000/110%)	40,000
Bonus (10%)	4,000

Note that the provision for bonus is 10% of income AFTER the bonus, thus the bonus is the difference between the net income before and after the bonus.

PROB. 1-22 *Suggested answer: (a) 28,600*

	Donn	Eddy	Farr	Total
10% bonus to Donn	10,000			10,000
6% interest on average capital	4,800	3,000	1,800	9,600
Balance (equally)	26,800	26,800	26,800	80,400
Total	41,600	29,800	28,600	100,000

In some instances, a managing partner is allowed a bonus that is to be based on the earnings of the business. The bonus is commonly stated as a percentage of profits, but the agreement should indicate whether the percentage is to be applied to the profit determined before deduction of the bonus or after deduction of the bonus. Based on the data provided in this problem, the "10% bonus of the profit" was assumed to be applied to the profit before deduction of the bonus.

PROB. 1-23 *Suggested answer (d) 210,000*

	Adam	Eve	Total
Salaries	60,000	60,000	120,000
Bonus to Adam:			
NY before bonus P360,000			
- NY after bonus (360,000/ 120%) 300,000	60,000		60,000
Balance (equally) 300,000	150,000	150,000	300,000
Total	270,000	210,000	480,000

*It should be pointed out that it was clearly mentioned in the problem that the P360,000 net income is **after salaries but before bonus**, therefore, the net income before salaries and bonus should be P480,000 (120,000 + 360,000).*

PROB. 1-24 *Suggested answer (c) 41,000*

		AA	BB	Total
Salaries		30,000	45,000	75,000
Bonus (after bonus)				
NY before Bonus	27,500			
NY after Bonus (27,500/110%)	25,000	2,500		2,500
10% interest		2,000	3,500	5,500
Balance (1/3:2/3)		6,500	13,000	19,500
Total		41,000	61,500	102,500

One of the alternatives in profit allocations if the net income is not sufficient is to completely satisfy all provisions of the profit and loss agreement and use the profit and loss ratios to absorb any deficiency or additional loss caused by such action.

PROB. 1-25 *Suggested answer (d) 8,800*

	AA	BB	Total
Salaries (30:45)	8,800	13,200	22,000

Another alternative in profit allocation if the net income is not sufficient is to satisfy each of the provision to whatever extent it is possible. In other words, the allocation of salaries would be satisfied to whatever extent possible before the allocation of interest is begun. If the provision of the profit and loss agreement are ranked by order of priority starting with salaries, and the total salaries amounted to P75,000, therefore the net income of P22,000, which is insufficient, will be distributed between AA and BB based on the degree of salary claims.

PROB. 1-26 *Suggested answer: (d) 2,000*

	Luz	Vi	Minda	Total
Interest				
8% x 80,000-75,000		400		
8% x 100,000-75,000			2,000	2,400
Salary (20:30)	11,040	16,560		27,600
Total	11,040	16,960	2,000	30,000

Again, where income is not sufficient or an operating loss exists, two alternatives may be employed: 1.) all provisions of the profit and loss agreement may be satisfied and any deficiency will be absorbed using the profit and loss ratio; and 2.) each of the provision may be satisfied to whatever extent possible. The second alternative, as applied above, requires that provisions of the profit and loss agreement be ranked by order of priority.

PROB. 1-27 *Suggested answer (b) 108,000*

	X	Y	Z	Total
10% of P100,000 to X	10,000			10,000
20% of excess to X				
(20% x 150,000)	30,000			30,000
5% of remaining in excess to Y and Z				
(5% x 210,000-150,000)		3,000	3,000	6,000
Balance, equally	68,000	68,000	68,000	204,000
Total	108,000	71,000	71,000	250,000

Note that the distribution of profit is based on the agreement of the partners.

PROB. 1-28

a. *Suggested answer (b) 3,450 (7,050) (19,550) (16,850)*

	Hanz	Ivy	Jasper	Kelly	Total
Salaries	20,000	10,000			30,000
Interest	5,000	4,500	2,000	4,700	16,200
Balance (equally)	(21,550)	(21,550)	(21,550)	(21,550)	(86,200)
Total	3,450	(7,050)	(19,550)	(16,850)	(40,000)

Based on the information provided in the problem, the profit and loss ratios are used to absorb any deficiency or any additional loss.

b. *Suggested answer (c) 20,740 12,560 2,000 4,700*

	Hanz	Ivy	Jasper	Kelly	Total
Interest	5,000	4,500	2,000	4,700	16,200
Bonus (3:2)	1,1,43	762			1,905
Salaries (20:10)	14,597	7,298			21,895
Total	20,740	12,560	2,000	4,700	40,000

Net income before bonuses	40,000
Net income after bonuses (40,000/105%)	38,095
Bonuses	1,905

If each of the provision of the profit and loss agreement are satisfied to whatever extent it is possible based on the given order of priority, at such provision (salaries) the remaining amount (21,895) shall be allocated using the degree of the claims.

PROB. 1-29 *Suggested answer (d) 270,000*

	Zita	Jones	Total
Salaries (360,000 x 2/12)	60,000	60,000	120,000
Bonus	60,000		60,000
Balance (equally)	150,000	150,000	300,000
Total	270,000	210,000	480,000

Net income before bonus	360,000
Net income after bonus (360,000/120%)	300,000
Bonus	60,000

Note that based on the given information, the net income after salaries is P360,000 (300,000 + 60,000), which is equivalent to P480,000 net income before salaries, bonus and distribution of balance using profit and loss ratio (equally).

ted answer: (b) 290,000

onus needed to equalize (40,000-25,000)	15,000
e after bonus and salaries (15,000/10%)	150,000
oy	110%
me before bonus but after salaries	165,000
aries (100,000 + 25,000)	125,000
ome before bonus and salaries	290,000

the question being asked is the amount of income necessary to ze, the appropriate approach is to determine the amount of the ence between the two alternatives, which is P15,000 bonus. At this t, the net income could be determined by working back, as shown above.

31 · Suggested answer: (a) 0

n case there is an industrial partner, and there is no profit and loss sharing agreement, an industrial partner shall not be liable for the losses. As to profit, the share of an industrial partner shall be that which is just and equitable under the circumstances. In order for an industrial partner be liable for the losses, there should be an expressed stipulation to that effect.

OB. 1-32 Suggested answer (c) 9,000

Vick's share of undistributed losses (30% x 30,000)	9,000

If the partners agree to distribute profits based on profit sharing ratio but are silent on loss sharing, partnership losses will be divided based on the agreed profit-sharing proportions.

PROB. 1-33

a. Suggested answer: (a) 500,000

B's capital balance, January 1, 2021 (1,000,000 x 10%)		100,000
Add: B's additional investment during 2021		500,000
Total		600,000
Less: B's drawings at the end of 2021	300,000	
B's capital balance, December 31, 2021	200,000	500,000
B's share in net loss for the year		100,000
Divided by B's interest in profit or loss		20%
Net loss of ABC partnership for the year ended Dec. 31, 2021		500,000

b. Suggested answer: (c) 550,000

A's capital balance, January 1, 2021 (1,000,000 x 50%)	500,000
Add A's additional investment during 2021	200,000
Total	700,000
Less A's share in net loss during 2021 (500,000 x 30%)	150,000
A's capital balance, December 31, 2021	550,000

c. Suggested answer: (b) 50,000

C's capital balance, January 1, 2021 (1,000,000 x 40%)		400,000
Less: C's share in net loss 2021 (500,000 x 50%)	250,000	
Less: C's drawings, end of 2021	100,000	350,000
C's capital balance, December 31, 2021		50,000

PROB. 1-34

a. Suggested answer: (d) 220.000

C's capital balance, December 31, 2018		320,000
Add C's drawings at the end of 2018		400,000
Total		720,000
Less: C's additional investment during 2018	300,000	
C's capital balance, January 1, 2018	200,000	500,000
C's share in partnership profit, 2018		220,00

s share in profit for the year 2018	220,000
ss C's interest original capital contribution (200,000 x 10%)	20,000
alance	200,000
lultiply by number of partners	3
emaining profit after interest, salary and bonus	600,000
Divide by 80%	80%
Net profit after salary and interest but before bonus	750,000
Add total interest and salary (100,000 + 200,000)	300,000
Partnership profit for the year ended December 31, 2018	1,050,000

c. *Suggested answer: (b) 150,000*

Partnership profit for the year ended December 31, 2018	1,050,000
Less total interest and salary (100,000 + 200,000)	300,000
Net profit after salary and interest but before bonus	750,000
Multiply by bonus percentage	20%
Bonus to A	150,000

d. *Suggested answer: (a) 1,140,000*

A's capital balance, January 1, 2018		300,000
Add: A's additional investment during 2018	500,000	
A's share in partnership profit during 2018 (30,000 + 160,000 + 150,000 +200,000)	540,000	1,040,000
Total		1,340,000
Less A's drawings during 2018		200,000
A's capital balance, December 31, 2018		1,140,000

e. *Suggested answer: (c) 890,000*

B's capital balance, January 1, 2018		500,000
Add: B's additional investment during 2018	200,000	
B's share in partnership profit during 2018 (50,000 + 40,000 + 200,000)	290,000	490,000
Total		990,000
Less B's drawings during 2018		100,000
B's capital balance, December 1, 2018		890,000

PROB. 1-35 *Suggested answer: (b) 54,000*

	Contributed Capital	Agreed Capital	Increase (Decrease)
Old partners	P 110,000	P 100,000	(P10,000)
New partner	40,000	(1/3) 50,000	10,000
Total	P 150,000	P 150,000	-

Blau's capital before admission of Lind	P 60,000
Less share in bonus to Lind (10,000 x 60%)	6,000
Blau's capital after admission of Lind	P 54,000

When a partnership is in urgent need of additional funds or the partners may desire the services of a certain individual, a new partner may be admitted with the provision that part of the capitals of the old partners shall be allowed as a bonus to the new partner. When the total contributed capital is ***equal*** *to the agreed capital, there is bonus. In this case, the amount by which the interest allowed to the new partner exceeds his investment may be considered as bonus contributed by the old partners. The bonus is deducted from the capitals of the old partners based in their original profit and loss ratio.*

PROB. 1-36 *Suggested answer (c) 56.25%*

Capital contributed by the new partner	90,000
Divide by total contributions (70,000 + 90,000)	160,000
New Partner's interest	56.25%

Since no bonus to be recognized, the capital contribution is equal to the capital credited to partners. Further, goodwill method is no longer used in partnership accounting.

PROB. 1-37 *Suggested answer (d) 15,000*

Ranken's capital (50% x 30,000)	15,000

When a new partner deals directly with an existing partner or partners rather than with the partnership entity, the acquisition price is paid to the selling partner/s and not to the partnership itself. The partnership records

the redistribution of capital interests by transferring all or a portion of the seller's capital to the new partner's capital account but does not record the transfer of any asset or consideration.

PROB. 1-38 *Suggested answer (b) 130,000 145,000 225,000*

	Amor	Bing	Cora
Interest purchased (1/2)	100,000	100,000	150,000
Excess payment (150,000) P&L	30,000	45,000	75,000
Total	130,000	145,000	225,000

A new partner may be admitted to the partnership by acquiring all or part of the capital interest of one or more existing partners in exchange for some consideration. The partnership records the redistribution of capital interest by transferring all or a portion of the seller's capital to the new partner's capital account but does not record the transfer of any asset. Any difference between the amounts paid by the new partner, which is not recorded in the books of the partnership, is allocated to the selling partners based on their profit or loss ratio.

PROB. 1-39 *Suggested answer (c) 230,000*

Total capital of the old partnership (560,000 + 320,000 + 40,000)	920,000
Divide by profit and loss (old partnership)	4/5
Total capital of the new partnership	1,150,000
Multiply by profit and loss of D	1/5
Required contribution by D	230,000

If the book value of the original partnership's net assets approximates fair market value or no bonus to be recognized, the incoming partner's contribution would be expected to be equal to the portion of the equity that the new partner is acquiring.

PROB. 1-40 *Suggested answer: (d) 1,500*

	Contributed Capital	Agreed Capital		Increase (Decrease)
Old partners	150,000	157,500		7,500
New partner	60,000	52,500	25%	(7,500)
Total	210,000	210,000		-

Bonus to A (7,500 x 20%)	1,500

Under the bonus method of admitting a new partner into the partnership, the total contributed capital (including that of the new partner) is equal to the new partnership capital. Accordingly, any bonus to the old partners shall be allocated using their old profit and loss ratio.

PROB. 1-41 *Suggested answer (c) Charged 5,000 against the capital balance of Philip and Marl.*

Under the bonus method, the excess of the amount paid by the partnership to the retiring partner shall be absorbed by the remaining partners based on their existing profit and loss ratio.

PROB. 1-42 *Suggested answer: (c)608,000 608,000*

	Mikee	Raul
Capital balances before withdrawal	600,000	600,000
Distribution of gain on realization (24,000/ 3)	8,000	8,000
Capital balances after withdrawal	608,000	608,000

When a partner withdraws, he may receive an amount equal, more than or less than his interest. The interest of the withdrawing partner is measured by his capital balances adjusted by the distribution of profit or loss from operations, and changes in valuation of all assets and liabilities. Thus, their capital balances will be increased by their respective share in the realization of noncash asset with a fair value different from its book value at the date of withdrawal.

PROB. 1-43 *Suggested answer (d)*

Note that the capital balance of the retiring partner is P1,800,000 and was paid P1,500,000, this situation will result to the recognition of bonus to the

remaining partners from the retiring partner. Thus, the difference of P300,000 was allocated to the remaining partner based on their profit and loss agreement (equally) by crediting their respective capital account. Further, goodwill method is no longer used in partnership accounting.

B. 1-44 *Suggested answer: (c) 45,450*

	Coll	Maduro	Prieto
Capital balances before Retirement of Coll	P42,000	P39,000	P 90,000
Coll, loan	9,000		
Adjustment of assets 2:2:6 (216,000 – 180,000)	7,200	7,200	21,600
Total interest	58,200	46,200	111,600
Less payment to Coll	61,200		
Balance	(3,000)	46,200	111,600
Bonus to Coll 2:6	3,000	(750)	(2,250)
Capital balances after Retirement of Coll	P 0	P45,450	P109,350

Again, when partner withdraws from a partnership, adjustment of assets to its fair market value should be made. Total interest of the withdrawing partner must be determined and be compared with the amount paid. Since the problem stated that the withdrawing partner is selling his interest to the partnership, the resulting difference between the total interest and the amount paid represents the bonus provided by the remaining partners to the withdrawing partner. Note that goodwill method is no longer used in partnership accounting.

PROB. 1–45 *Suggested answer (d) Reduction in capital of P55,000 for Roy.*

	Peter	Queen	Roy
Second hand value taken			50,000
Loss on realization (65,000 – 50,000) (equally)	5,000	5,000	5,000
Total reduction in capital	5,000	5,000	55,000

PROB. 1-46 *Suggested answer: (b) 480,000*

B's capital balance before admission of D	800,000
Less capital to be transferred to D (800,000 x 40%)	320,000
B's capital balance after admission of D	480,000

PROB. 1-47

a. Suggested answer: (a) 960,000

C's capital balance before admission of D	900,000
Add share of C in bonus given by D (200,000 x 30%)	60,000
C's capital balance after admission of D	960,000

b. Suggested answer: (b) 1,300,000

B's capital balance before admission of D	700,000
Add share of B in asset revaluation (1,000,000 x 60%)	600,000
B's capital balance after admission of D	1,300,000

PROB. 1-48 *Suggested answer:*

a. Suggested answer: (d) 250,000

Total contributed capital of all partners (3,000,000 + 500,000)	3,500,000
Less total agreed capitalization of new partnership	3,000,000
Total asset impairment	500,000
Multiply by A's profit or loss ratio	50%
A's share in asset impairment	250,000

b. Suggested answer: (a) 200,000

D's contributed capital	500,000
Less D's capital credit in the new partnership (3,000,000 x 10%)	300,000
Bonus given by D to the existing partners	200,000

c. *Suggested answer: (b) 300,000*

Total agreed capitalization of the new partnership	3,000,000
Multiply by profit or loss ratio of D	10%
Capital credit of D to the new partnership	300,000

d. *Suggested answer (a) 580,000*

C's capital balance before admission of D	700,000
Less C's share in asset impairment (500,000 x 40%)	200,000
Balance	500,000
Add C's share in bonus given by D (200,000 x 40%)	80,000
C's capital balance after admission of D	580,000

PROB. 1-49 *Suggested answer: (d) 525,000*

A's capital balance before retirement of C	500,000
Add A's share in asset revaluation (150,000/60% x 10%)	25,000
A's capital balance after retirement of C	525,000

PROB. 1-50 *Suggested answer: (c) 316,000*

B's capital balance before retirement of C	300,000
Add share of B from bonus given by C (20,000 x 4/5)	16,000
B's capital balance after retirement of C	316,000

PROB. 1-51

a. *Suggested answer: (c) 35,000*

Total partnership capital (140,000/ 4/5)	175,000
Multiply by	1/5
Assets to be contributed by Z	35,000

Again, if there is no bonus and goodwill method is no longer used in partnership accounting, total partnership capital may be computed using the capital accounts of the old partners as the base, as shown above.

b. *Suggested answer: (d) 24,000 13,000 13,000*

	N	X	Y
Capital balances	P 60,000	P 40,000	P 40,000
Loss on realization (80,000 - 40,000) 4:3:3	(16,000)	(12,000)	(12,000)
Possible loss (130,000 - 80,000) 4:3:3	(20,000)	(15,000)	(15,000)
Cash distribution	P 24,000	P 13,000	P 13,000

In installment liquidation, to ensure an equitable distribution of cash to the partners, considerable care is required. Usually, the statement of liquidation is supported by the Schedule of Safe Payments, wherein each installment of cash is distributed as if no more cash is forthcoming. Thus, cash is distributed to a partner only if he has an excess credit balance in his partnership interest after absorption of his share of the maximum possible loss that may occur, which consists of the assumed unrealizable value of the remaining noncash assets, cash withheld for payment of anticipated liquidation expenses and unrecorded liabilities that may arise, and any additional loss that may also accrue to the partners when a debit balance in any of the capital accounts results from the allocations of possible loss. Should the liquidation extend over a long period of time, these calculations may become frequent such that it may be desirable to prepare in advance an installment distribution plan, known as Cash Priority Program.

PROB. 1-52

a. *Suggested answer: (d) 145,000*

Total capital [(348,000 + 232,000)/ 80%]	725,000
Capp's interest	x 20%
Cash or other assets to be contributed by Capp	145,000

It should be pointed out that the problem clearly state that no bonus is to be recognized and goodwill method is no longer used in partnership accounting, thus the total capital of the old partners was used as the basis in computing the total capital of the partnership.

b. *Suggested answer: (b) 273,000*

	Alfa	Beda
Capital balances	348,000	232,000
Beda, loan		(30,000)
Total interest	348,000	202,000
Loss on realization (625,000 - 500,000) 6:4	(75,000)	(50,000)
Cash to be distributed	273,000	152,000

Beda, loan account was appropriately presented as an asset (receivable of the partnership from Beda), therefore it will reduce the capital balance of Beda. And loss on realization should be charged to the partners' capital. In partnership liquidation, cash is distributed based on the capital balances of the partners after any adjustments. It should be pointed out that the total amount of cash to be distributed between partners equals the total partners' capital after adjustments.

PROB. 1-53 *Suggested answer (d) 27,500 0 52,000*

	Cohen	Butler	Davis	Total
Capital balances	60,000	(10,000)	33,000	83,000
Notes payable to Davis			32,000	32,000
Actual liquidation exps.	(7,000)	(4,200)	(2,800)	(14,000)
Loss on realization (248,000 – 218,000)	(15,000)	(9,000)	(6,000)	(30,000)
Addt'l contribution - B		8,500		8,500
Balances	38,000	(14,700)	56,200	79,500
Absorption - Butler	(10,500)	14,700	(4,200)	-
Cash payments	27,500	-	52,000	79,500

Liquidation expenses and loss on realization are charged against the partners capital accounts. The liability of partners in a partnership is unlimited, thus, the creditors of the partnership may go after the partners to the extent of their personal assets. However, it should be noted that under the doctrine of marshalling of assets, personal assets should be applied first to personal obligations and any excess shall be applied to the unliquidated partnership obligation.

PROB. 1-54 *Suggested answer: (a) 0*

	Axel	Barr	Cain
Capital balances			
Before liquidation	P40.000	P180.000	P30.000
Loss on realization 4:3:3			
(200.000 - 300.000)	40.000	30.000	30.000
Capital balances			
After liquidation	P 0	P150.000	P 0

Since all assets are distributed at one point in time rather than installments, this represents simple liquidation. As assets are converted into cash, any differences between the book values and the amounts realized represent gains or losses to be divided among partners in the profit and loss ratio. Such gains and losses are carried to the capital accounts. The capital balances then become the basis for settlement.

PROB. 1-55 *Suggested answer: (c) 195,000 decrease*

	Nal	Lou	Gee
Capital balances			
Before liquidation	P175,000	P125,000	P175,000
Distribution of loss 3:2:5			
(P475,000 + 25,000)	(150,000)	(100,000)	(250,000)
Balances	25,000	25,000	(75,000)
Absorption of Gee (3:2)	(45,000)	(30,000)	75,000
Capital balances	(P20,000)	(P5,000)	-

Distribution of loss	P 150,000
Absorption of Gee	45,000
Decrease in capital of Nal	P 195,000

Note that upon liquidation, all of the partnership's assets are sold and sufficient cash is realized to pay all claims except one for P25,000, therefore, the partnership incurred loss from realization, which will eventually reduce the capital balances of the partners. In addition, the deficiency of an insolvent partner is simply eliminated by absorption, thus increasing the decrease in capital account of Nal to P195,000, as shown above. Incidentally, since Nal and Lou are solvent, additional cash of P20,000 and P5,000, respectively will be invested by them.

'ROB. 1-56 *Suggested answer: (b) 170,000 90,000*

Given that noncash assets were sold for an amount equal to its book value, therefore, no gain or loss was realized from the sale of noncash assets. Thus, the partners will receive an amount equal to their respective capital balances before liquidation.

PROB. 1-57 *Suggested answer (b) 175,000, 125,000*

Total capital of the partnership (750,000 + 500,000)	1,250,000
Add liability (Notes payable)	200,000
Total assets	1,450,000
Less available cash	300,000
Loss on realization	1,150,000

	Sammy	Michael
Capital balances before liquidation	750,000	500,000
Notes payable to Michael		200,000
Total interest	750,000	700,000
Loss on realization (equally) (1,150,000)	575,000	575,000
Capital balances after cash distribution	175,000	125,000

Loss on realization is the difference between the total assets (equal to the total capital and liabilities) and the amount realized from its sale.

PROB. 1-58 *Suggested answer: (a) 136,000*

	Smith	Jones
Capital balances	P 195,000	P 155,000
Smith, loan (Dr)	(20,000)	
Total interest	175,000	155,000
Loss on realization (60:40) (450,000 – 385,000)	(39,000)	(26,000)
Cash available for partners	P 136,000	P 129,000

Again, since all assets are distributed at one point in time rather than installments, this represents simple liquidation or total liquidation. The loan account was presented as an asset of the partnership, therefore, it is a

receivable on the part of the partnership, and eventually, reduces the capital balance of the partner concerned.

PROB. 1-59 *Suggested answer: (b) 25,000*

	Munoz	Nieva	Perez
Capital balances			
Before liquidation	312,500	107,500	50,000
Loan balances		80,000	25,000
Total interest	312,500	187,500	75,000
Loss on realization (5:3:2)			
(900,000 - 400,000)	(250,000)	(150,000)	(100,000)
Balances (deficiency)	62,500	37,500	(25,000)

The loan balances were presented in the liability section of the condensed balance sheet, thus, these should be treated as obligations of the partnership and eventually increase the interests of the partners. Since Perez is the only solvent partner, while other partners incur no deficiency, Perez will invest additional cash equal to his own deficiency.

PROB. 1-60

a. *Suggested answer (b) 42,000*

Total capital before liquidation (40,000 + 25,000 + 5,000)	70,000
Less: Cash left for distribution	28,000
Loss on realization of the non-cash assets	42,000

Upon payment to partners in the event of liquidation, the amount of cash available for distribution is always equal to the total partners' capital.

b. *Suggested answer (c) 17,800*

	A	M	E
Capital balances before liquidation	40,000	25,000	5,000
Loss on realization (3:2:1) (42,000)	(21,000)	(14,000)	(7,000)
Balances	19,000	11,000	(2,000)
Absorption of E (3:2)	(1,200)	(800)	2,000
Cash payment to A and B	17,800	10,200	-

ıt of liquidation, all liquidation expenses and gains or losses from ı of partnership assets must be allocated to the partners before assets ıre distributed to the individual partners. Failure to consider these may result in the premature distribution of assets to a partner. more, generally accepted accounting principle states that partners should ute, assets to the partnership to the extent of their debit balances. ıer, if such contribution is not possible because of special personal or legal ıderations, the debit balance will be viewed as a realization loss and ated according to the remaining partners' profit or loss ratio.

.. 1-61 *Suggested answer (c) 410,000 230,000 0*

	A	B	C
Capital balances before liquidation	560,000	320,000	40,000
Loss on realization (280,000)(5:3:2)	(140,000)	(84,000)	(56,000)
Balances	420,000	236,000	(16,000)
Absorption of C (5:3)	(10,000)	(6,000)	16,000
Payment to A and B	410,000	230,000	-

Again, generally accepted accounting principle states that partners should contribute assets to the partnership to the extent of their debit balances. However, if such contribution is not possible because of special personal or legal considerations, the debit balance will be viewed as a realization loss and allocated according to the remaining partners' profit or loss ratio.

PROB. 1-62

a. *Suggested answer: (a) 250,000*

Capital balance of B before liquidation (debit balance)	(650,000)
Add payable to B	1,000,000
B's capital balance after right of offset	350,000
Less B's share in total loss on liquidation (500,000 + 100,000 x 10%)	60,000
B's capital balance after loss on liquidation but before absorption of A's insolvency	290,000
Less B's share in A's debit capital balance (160,000 x ¼)	40,000
Cash received by B at the end of liquidation	250,000

b. *Suggested answer: (b) 150,000*

C's capital balance before liquidation	350,000
Add payable to C	100,000
C's capital balance after the right of offset	450,000
Less C's share in total loss on liquidation (500,000 + 100,000 x 30%)	180,000
C's capital balance after loss on liquidation but before absorption of A's insolvency	270,000
Less C's share in A's debit capital balance (160,000 x ¾)	120,000
Cash received by C at the end of liquidation	150,000

PROB. 1-63

a. *Suggested answer: (d) 20,000*

B's capital balance before liquidation	300,000
Less share in presumed total loss in liquidation (70,000/10 x 40%)	280,000
Cash received by B at the end of liquidation	20,000

b. *Suggested answer: (a) 450,000*

Cash received by partners at the end of liquidation (80,000 + 20,000)		100,000
Add: Cash paid for liquidation expenses	50,000	
Cash paid for total liabilities	1,500,000	1,550,000
Total		1,650,000
Less cash balance before liquidation		1,200,000
Net proceeds from sale of noncash asset		450,000

	Alex	Jay	John
Capital balances	P 95,000	P 80,000	P 70,000
Loss on realization (150,000 - 70,000) 2:1:1	(40,000)	(20,000)	(20,000)
Possible loss (265,000 - 150,000) 2:1:1	(57,500)	(28,750)	(28,750)
Balances	(2,500)	31,250	21,250
Absorption of Alex 1:1	2,500	(1,250)	(1,250)
Cash distribution	P 0	P 30,000	P 20,000

Again, in installment liquidation, to ensure an equitable distribution of cash to the partners, considerable care is required. Usually, the statement of liquidation is supported by the Schedule of Safe Payments, wherein each installment of cash is distributed as if no more cash is forthcoming.

Thus, cash is distributed to a partner only if he has an excess credit balance in his partnership interest after absorption of his share of the maximum possible loss that may occur, which consists of the assumed unrealizable value of the remaining noncash assets, cash withheld for payment of anticipated liquidation expenses and unrecorded liabilities that may arise, and any additional loss that may also accrue to the partners when a debit balance in any of the capital accounts results from the allocations of possible loss.

PROB. 1-65 *Suggested answer: (c) 5,600*

When the liquidation period extends over a long period of time, calculations of safe payments to partners may become frequent and bothersome such that it may be desirable to prepare in advance an installment distribution plan, called Cash Priority Program. This program, which is an alternative to Schedule of Safe Payments, permits the partners to determine how cash should be safely distributed when it becomes available. Using this program, the first priority of payments should be provided to the partner with the highest loss absorption balance. The amount to be paid could be determined by multiplying the excess loss absorption balance of partner over another by his profit and loss percentage. The process should be continually done until the loss absorption balances of the partners are equal, in which case, distribution of available cash should be made according to their profit and loss percentage. Since there are three partners in the firm (Goh, Kong, and Wei), in the third priority of payments, the amount to be received by Wei is

P5,600 (P28,000 x 20%), because at this point, their loss absorption balances are equal.

PROB. 1-66 *Suggested answer: (c) 49,000, 0, 57,000*

	Able	Baker	Chapman
Capital balances	50,000	(32,000)	70,000
Personal assets applied to capital deficiency (80,000 – 50,000)		30,000	
Capital balances applied to personal liabilities (72,000 – 60,000)			(12,000)
Balances	50,000	(2,000)	58,000
Absorption of Baker	(1,000)	2,000	(1,000)
Balances after applying the doctrine of marshalling of assets.	49,000	0	57,000

The doctrine of marshalling of assets is applied when the partnership and/or one or more of the partners are insolvent. It provides that partnership assets are first available for payment of partnership debts. Any excess is applied to individual partners' debt to the extent of his interest. While, personal assets are applied against personal debts, any excess is applied to partnership creditors, then to partner's debit capital balance.

PROB. 1-67 *Suggested answer: (c) 320,000*

Personal assets	200,000
Add capital credit balance	120,000
Total amount due to personal creditors	320,000

Note that the capital accounts of Morgan and other partners have credit balances, therefore, the partnership has no deficient partner. Accordingly, there is no possible absorption that will reduce the capital of Morgan, thus the personal creditors of Morgan can collect, not only his personal assets but to the extent of his entire capital balance.

PROB. 1-68 *Suggested answer (c) 0 31,000 49,000*

	Salve	Galo	Norma
Capital balances before liquidation	80,000	115,000	105,000
Loss on realization (50,000) (5:3:2)	(25,000)	(15,000)	(10,000)
Balances	55,000	100,000	95,000
Less: Possible loss (170,000)(5:3:2)	(85,000)	(51,000)	(34,000)
Balances	(30,000)	49,000	61,000
Absorption of Salve (3:2)	30,000	(18,000)	(12,000)
Safe payment to partners	-	31,000	49,000

To avoid the problem associated with premature payments, installment payments may be made to partners only after anticipating all liabilities, possible losses, and liquidation expenses. The allocation of the assumed loss is allocated among the partners according to their profit and loss ratio. The allocation of the assumed loss could produce debit balances in partners' capital accounts, and these balances are treated as being uncollectible. Therefore, the assumed debit capital balances are allocated to those partners with credit balances according to their profit and loss ratio.

PROB. 1-69 *Suggested answer (c) 40,000*

	Almond	Barney	Colors
Total Interest	20,000	50,000	90,000
Divide by P&L	20%	40%	40%
Loss absorption balance	100,000	125,000	225,000
Priority 1 – Colors			
Balances	100,000	125,000	(100,000)
Priority 2 – Colors & Barney			125,000
Balances (P & L)		(25,000)	(25,000)
	100,000	100,000	100,000

Since the question being asked is "one of the partners will get .... before any other partners get anything", therefore, it is the partner under priority no. 1 (Colors). Colors shall receive, under priority no. 1, P40,000 (100,000 x 40%)

PROB. 1-70

a. *Suggested answer (b) P70,000 outside liabilities, P30,000 Able*

	Able	Baker	Chapman
Total Interest	90,000	30,000	50,000
Divide by P&L (equally)	1/3	1/3	1/3
Loss absorption balance	270,000	90,000	150,000
Priority 1 – Able	(120,000)		
Balance	150,000	90,000	150,000
Priority 2 – Able & Chapman	(60,000)		(60,000)
Balance	90,000	90,000	90,000
Priority 3 – P&L			

Payments by priority:	Able	Baker	Chapman
Priority 1 (120,000 x 1/3)	40,000		
Priority 2 (60,000 x 1/3)	20,000		20,000

	Cash	Liability	Able	Baker	Chapman
Total	100,000				
Liability	(70,000)	70,000			
Balance	30,000				
Loan - A	(20,000)		20,000		
Balance	10,000				
Priority 1	(10,000)		10,000		
Total		70,000	30,000		

The Partnership Law provides, that in the event of partnership liquidation, available cash shall be distributed in the following order: first: to outside creditors, second: to inside creditors (partners' loan), and third: to owners (partners' capital accounts).

b. Suggested answer (d) Able: 55,000, Baker: 15,000, Chapman: 5,000

	Able	Baker	Chapman
Total Interest (excluding loan)	70,000	30,000	50,000
Divide by P&L (equally)	1/3	1/3	1/3
Loss absorption balance	210,000	90,000	150,000
Priority 1 – Able	(60,000)		
Balance	150,000	90,000	150,000
Priority 2 – Able & Chapman	(60,000)		(60,000)

Balance	90,000	90,000	90,000
Priority 3 – P&L			

Payments by priority:	Able	Baker	Chapman
Priority 1 (60,000 x 1/3)	20,000		
Priority 2 (60,000 x 1/3)	20,000		20,000

	Cash	Able	Baker	Chapman
MV of assets	195,000			
Liabilities	(70,000)			
Able, loan	(20,000)			
Balance	105,000			
Priority 1	(20,000)	20,000		
Balance	85,000			
Priority 2	(40,000)	20,000		20,000
Balance	45,000			
Priority 3	(45,000)	15,000	15,000	15,000
Total		55,000	15,000	35,000
Less Asset taken by Chapman				30,000
Balance		55,000	15,000	5,000

PROB. 1-71

a. *Suggested answer: (b) 240,000*

Cash balance before liquidation		1,600,000
Add net proceeds from sale of noncash asset during January (1,000,000 + 100,000)		1,100,000
Total		2,700,000
Less: Cash paid for liquidation expenses, January	50,000	
Cash paid for liabilities to third person, January	400,000	
Cash withheld for unpaid liabilities third person (2,000,000 x 80%)	1,600,000	
Cash withheld for future liquidating expenses	150,000	2,200,000
Cash available for distribution to partners		500,000
Less total capital of all partners (100,000 + 500,000 + 400,000)		1,000,000
Total loss on liquidation for the first month of installment		500,000

Capital balance of C before liquidation	400,000
Less C's share in total loss in liquidation (500,000 x 20%)	100,000
C's capital balance after loss on liquidation but before absorption of A's insolvency	300,000
Less C's share in A's debit balance (150,000 x 2/5)	60,000
Cash received by C at the end of liquidation	240,000

b. *Suggested answer: (d) 165,000*

Estimated future liquidating expenses, January 31, 2021	150,000
Add Book value of remaining noncash asset, January 3, 2021	400,000
Maximum possible loss, January 31, 2021	550,000
B's profit or loss	30%
B's share in maximum possible loss	165,000

c. *Suggested answer: (c) 1,750,000*

Cash withheld for future liquidating expenses	150,000
Add cash withheld for remaining unpaid liabilities (2,000,000 x 80%)	1,600,000
Total cash withheld, January 31, 2021	1,750,000

d. *Suggested answer: (a) 75,000*

Cash balance, January 31, 2021		1,750,000
Add Net proceeds from sale of noncash asset during January (400,000 + 100,000)		300,000
Total		2,050,000
Less: Cash paid for liquidation expenses, February	100,000	
Cash paid for liabilities third person, February	1,500,000	1,600,000
Cash available for final distribution to partners		450,000
Total capital of all partners (100,000 + 240,000 + 160,000)		500,000
Total loss on liquidation for the first month of installment		50,000
Capital balance of A, January 21, 2021		100,000
Add share of A in total loss in liquidation during February (50,000 x 50%)		25,000
Cash received by A during final liquidation, February 28, 2021		75,000

PROB. 1-72

a. *Suggested answer: (b) 2,592 1,440*

	Roy	Gil	Total
Capital before adjustment	P94,800	P214,200	P309,000
Accounts receivable	(6,667)	(13,333)	(20,000)
Inventory	(7,333)	(14,667)	(22,000)
Fixed assets	2,200	4,400	6,600
Total stock to be issued	83,000	190,600	273,600
Common stock(720 x 10)	7,200	7,200	14,400
Preferred stock P100 par	P75,800	P183,400	P259,200

Shares to be issued:	Roy	Gil	Total
Common stock	720	720	1,440
Preferred stock	758	1,834	2,592

In order to secure the advantages found in the corporate form of business organization, the partners may decide to incorporate. Upon incorporation, the corporation will act to acquire the net assets of the partnership in exchange for its stock. The stock received by the partnership is distributed to the partners in settlement of their equities. The corporation therefore takes over the assets and assumes the liabilities of the partnership; the partnership is dissolved and the partners now become stockholders in the newly formed corporation. The allocated common shares and preferred shares were computed by dividing the amount of each stock by its respective par value, as shown above.

b. *Suggested answer: (c) 758 720 1,834 720*
See above computations in question "a".

PROB. 1-73 *Suggested answer: (c) 215,000*

Net assets at fair value (P240,000 – 20,000)	P 220,000
Less par value of stock issued (1,000 x 5)	5,000
Additional paid in capital	P 215,000

The incorporation of a partnership results in the formation of a new accounting (and legal) entity. This means that the partnership must adjust its records up to the date of incorporation. Among others, the partnership's books are adjusted to reflect the fair market value of the partnership assets and the present value of partnership liabilities. In addition, when capital stocks were issued, capital stock account should be credited at par or stated value, any excess over par or stated value must be credited to additional paid in capital.

Chapter 2

JOINT ARRANGEMENTS

Introduction

One of the new standards issued by International Accounting Standards Board (IASB) in May 2011 to take effect for annual periods beginning on or after 1 January 2013 was IFRS 11 *Joint Arrangements*, which establishes principles for financial reporting by parties to a joint arrangement.

This IFRS 11 supersedes IAS 31 *Interest in Joint Ventures* and SIC-13 *Jointly Controlled Entities – Nonmonetary Contributions by Venturers*; and shall be applied by all entities that are a party to a joint arrangement. The primary goal behind this new standard was to arrive at an accounting treatment which accurately reflects the true nature of the economic interest held by an entity. The scope of the standard is substantively aligned with IAS 31 but is defined with new terms. For example, IAS 31 used the term "joint venture" to capture jointly controlled arrangement and the term "joint venture" was replaced by the term "joint arrangement" in IFRS 11. In some cases, IFRS 11 uses some of the same terms as IAS 31 but with different meanings. Thus there may be some confusion whether IFRS 11 is a significant change from IAS 31. For example, whereas IAS 31 identified three forms of joint ventures where there is joint control, such as: 1.) Jointly controlled operations; 2.) Jointly controlled assets; and 3.) Jointly controlled entities, IFRS 11 addresses only two forms of joint arrangements, such as: 1.) Joint operations; and 2.) Joint ventures.

Definition of Terms

a. **Joint arrangement** refers to an arrangement of which two or more parties have joint control.
b. **Joint control** refers to the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

c. **Joint operation** refers to a type joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement.
d. **Joint venture** refers to a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement.
e. **Joint venturer** refers to a party to a joint venture that has joint control of that joint venture.
f. **Party to a joint arrangement** refers to an entity that participates in a joint arrangement, regardless of whether that entity has joint control of the arrangement.
g. **Separate vehicle** refers to a separately identifiable financial structure, including separate legal entities or entities recognised by statute, regardless of whether those entities have a legal personality.

JOINT ARRANGEMENTS

A joint arrangement is an arrangement of which two or more parties have joint control. As with IAS 31, IFRS 11 addresses arrangements where two or more entities come together for a specific reason and share control. In the most cases, the terms of the arrangement will be set out in form of a written contract or equivalent, which indicates the purpose and activity of the joint arrangement and the joint decision making processes. The IFRS defines joint control as the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities (i.e. activities that significantly affect the returns of the arrangement) require the unanimous consent of the parties sharing control. IFRS 11 paragraph 5 provides that a joint arrangement has the following characteristics:

1. The parties are bound by a contractual arrangement.
2. The contractual arrangement gives two or more of those parties joint control of the arrangement.

TYPES OF JOINT ARRANGEMENTS

IFRS 11 *Joint arrangement* provid33es that an entity shall determine the type of joint arrangement in which it is involved. The standard addresses only two types of joint arrangements; such as: 1.) *Joint Operations*; and 2.) *Joint Ventures*.

The classification of a joint arrangement as a *joint operation* or a *joint venture* depends upon the rights and obligations of the parties to the arrangement. In IAS 31 *Interest in Joint Ventures*, the classification was triggered by: 1.) The structure of the arrangements; and 2.) When structured in a legal entity, the choice between proportionate consolidation and the equity method. Whereas in IFRS 11 *Joint Arrangements*, the classification of the arrangements will require entities to apply judgment when assessing their rights and obligations arising from the arrangements. In doing so, an entity should consider the following: 1.) The structure and legal form of the arrangement; 2.) The terms agreed by the parties in the contractual arrangements; and 3.) When relevant, other facts and circumstances. Other facts and circumstances include consideration of whether the parties designed the arrangement so that its trade is substantially only with its parties (i.e. the parties have rights to substantially all the economic benefits of the assets placed in the separate vehicle), with the result that the arrangement continuously depends on the parties for setting the liabilities relating to the activity conducted through the arrangement.

Joint Operations

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement, as in all of these situations:

1.) When the arrangements are NOT structured through a separate vehicle (i.e. the arrangements are structured through a contractual arrangement only). (Note that a *separate vehicle* is the legal entity established for purposes of the joint arrangement.)

2.) When the arrangements are structured through separate vehicles, the arrangements will be joint operations when:

   a. The legal form of the separate vehicle does not cause the vehicle to be considered in its own right (i.e. the assets and liabilities placed in the separate vehicle are the assets and liabilities of the parties and not the assets and liabilities of the separate vehicle).

   b. The arrangement is structured in a separate vehicle that can be considered in its own right but the terms agreed by the parties in their contractual arrangement modify the features of the legal form and cause the assets and liabilities held in the separate to be the parties' assets and liabilities.

c. Even though the legal form and the terms of the contractual arrangement do not confer on the parties rights to the assets and obligations for the liabilities, the arrangement has been designed in such a way that the parties have rights to substantially all the economic benefits of the assets placed in the separate vehicle. In addition, the arrangement is continuously dependent on the parties for settling the liabilities relating to the activity conducted through the arrangement.

Each party to the joint operation, who are called joint operators, recognizes its share of the assets, liabilities, revenues and expenses of the joint arrangements. The share is determined based on the rights and obligations of each party as set out in the contractual terms, rather than automatically basing the recognition of all assets, liabilities, revenues and expenses on the ownership interest that the entity has in the joint operation. The joint operator is required to apply the corresponding IFRS to each financial statement element recognized.

Joint operations are accounted for in the same manner in the separate financial statements as in the consolidated financial statement (i.e., the investor recognizes directly its share of assets, liabilities, revenues and expenses related to the joint operations).

Joint Ventures

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. Those parties are called joint venturers. Joint ventures are arrangements structured in separate vehicles that have the following features:

a. The legal form of the separate vehicle and contractual terms agreed by the parties do not confer on the parties' rights to the assets and obligations for the liabilities of the activities carried out; and

b. They have been designed to have a trade on their own, which makes them face directly the risks arising from activities such as, demand, credit or inventory risk.

One of the primary reasons for the issuance of IFRS 11, Joint Arrangements, was to increase comparability within IFRS by removing the choice for jointly controlled entities to use proportionate consolidation method. Instead, IFRS 11 requires a joint venture to recognize an investment and the use of the equity method of accounting under IAS 28 (revised 2011), Investment in Associates and Joint Ventures for interest

in joint ventures, thereby eliminating the proportionate consolidation method. This also converges with US GAAP, which requires the equity method for joint ventures. Under the equity method (IAS 28), the investment is recognized initially at cost, and then the carrying amount is adjusted to recognize the investor's share of profit or loss of the investee after that date. Adjustments to the carrying amount may be necessary for distribution received or through changes in investor's interest in the investee or changes arising from the revaluation of property, plant and equipment.

Joint Operation Vs Joint Venture

As discussed earlier, the principles set out in IFRS 11 provides that: joint operation is where a party has the rights to the assets and obligations for the liabilities of a joint arrangement; while joint venture is where the parties to the joint arrangement have an interest to the net assets (investment).

It is expected that it will be uncommon for a party to have the rights and obligations relating to a joint arrangement when a separate vehicle is part of the arrangement. A separate vehicle is a separate identifiable financial structure, including separate legal entities or entities recognized by statute, regardless of whether those entities have a legal personality. Based on this definition, the term "separate vehicle" is intended to be broader than a "separate legal entity". The most common form of vehicle used to structure joint arrangements are limited liability companies, partnerships, corporations, associations and trusts.

The existence of a separate vehicle is a necessary but not a sufficient condition for a joint arrangement to be considered a joint venture. In the absence of a separate vehicle, IFRS 11 clearly provides that the parties to the joint arrangement who have direct rights and obligations to the assets and liabilities of the arrangement will be classified as a joint operation. However, in an arrangement with a separate vehicle, all relevant facts and circumstances should be considered in determining whether the parties to the arrangement have rights to the net assets of the arrangement.

Previous discussions to classify a joint arrangement whether as joint operations or joint venture may be simplified by using the following *four steps process*:

Step 1:	Is the joint arrangement structured through a separate vehicle?
No:	An arrangement that is NOT structured through a separate vehicle is a *joint operation.*
Yes:	A joint arrangement that is structured through a separate vehicle is either a joint venture or joint operation depending on the parties'

	rights and obligations relating to the arrangement. The parties need to assess whether the legal form of the separate vehicle, the terms of the contractual arrangement and when relevant any other facts and circumstances provide the parties either rights to the assets and obligations for the liabilities relating to the arrangement (joint operation) or rights to net assets of the arrangement (joint venture).
Step 2:	Does the legal form of the separate vehicle give the parties rights to the assets, and obligations to the liabilities, relating to the arrangement?
Yes:	If the legal structure is such that the parties have rights to assets and are obligated for the liabilities with no limitations, the legal entity does not create separation between the parties and the arrangement. Therefore, this is a *joint operation.*
No :	Basically, a separate vehicle that does not allow the parties rights to assets and obligations for liabilities relating to the arrangement indicates that it is a joint venture. However, the contractual terms between the parties and, when relevant, other facts and circumstances can override the legal form. Thus, more information must be obtained through the next question (Step 3).
Step 3:	Do the terms of the contractual arrangement specify that the parties have rights to the assets, and obligations for the liabilities, relating to the arrangement?
Yes:	When the parties might enter into contractual arrangement that modify the legal form of the arrangement and create different rights and obligations (i.e., the contractual terms give the parties rights to assets and obligations for liabilities), the arrangement is a joint operation.
No :	When a separate vehicle is used and the terms of the contractual arrangement do not indicate that the joint arrangement is a joint operation, the parties should consider any other relevant facts and circumstances in determining the type of arrangement.
Step 4:	Do other facts and circumstances lead to rights to assets and obligations for liabilities being conferred upon the parties to the arrangement?
Yes:	When the parties designed the arrangement so that its activities primarily aim to provide the parties with an output (i.e., the parties have rights to all of the economic benefits generated by the assets in

	the separate vehicle), and it depends on the parties on a continuous basis for settling the liabilities relating to the activity conducted through the arrangement (i.e., the parties are required to fund the settlement of the liabilities of the joint arrangement because the arrangement is exclusively dependent on the parties for the generation of cash flows), this arrangement is a *joint operation.*
No :	When other facts and circumstances provides that the joint arrangement will sell output to the third parties because the joint arrangement would assume demand, inventory and credit risks, this joint arrangement is a *joint venture.*

Types of Joint Arrangement		
	Joint Operation	**Joint Venture**
Criteria for Classification	(1) The Joint Arrangement has no juridical personality or (2) The Joint Arrangement has week juridical personality for being mere alter ego of joint operators.	The Joint Arrangement has strong juridical personality separate and distinct from its joint venturers.
Right of Parties exercising Joint Control	rights to the assets, and obligations for the liabilities, relating to the arrangement	rights to the net assets of the arrangement
Presence of Investment Account	None	Yes (Investment in Joint Venture)
Accounting Method by the Parties exercising Joint Control	Contract Based (Based on the contractual provision of joint arrangement of the operators)	Equity Method under PAS 28

Financial statements of parties to a joint arrangement Joint operations

A joint operator recognizes in relation to its interest in a joint operation:

- its assets, including its share of any assets held jointly:
- its liabilities, including its share of any liabilities incurred jointly;

- its revenue from the sale of its share of the output of the joint operation;
- its share of the revenue from the sale of the output by the joint operation; and
- its expenses, including its share of any expenses incurred jointly.

A joint operator accounts for the assets, liabilities, revenues and expenses relating to its involvement in a joint operation in accordance with the relevant IFRSs.

The acquirer of an interest in a joint operation in which the activity constitutes a business, as defined in PFRS 3 *Business Combinations*, is required to apply all of the principles on business combinations accounting in PFRS 3 and other IFRSs with the exception of those principles that conflict with the guidance in PFRS 11.

These requirements apply both to the initial acquisition of an interest in a joint operation, and the acquisition of an additional interest in a joint operation (in the latter case, previously held interests are not remeasured).

A party that participates in, but does not have joint control of, a joint operation shall also account for its interest in the arrangement in accordance with the above if that party has rights to the assets, and obligations for the liabilities, relating to the joint operation.

ACCOUNTING FOR SMALL AND MEDIUM-SIZED ENTITIES (SMEs)

Section 15, *Investment in Joint Ventures,* applies to accounting for joint ventures in consolidated financial statements and in the financial statements of an investor that is not a parent but that has a venturer's interest in one or more joint ventures.

A joint venture is a contractual arrangement whereby two or more parties undertake an economic activity that is subject to joint control. A joint control is the contractually agreed sharing of control over an economic activity, and exists only when the strategic financial and operating decisions relating to the activity require the unanimous consent of the parties sharing control. When an investor in a joint venture does not have joint control, that investment shall be accounted in accordance with Section 11, *Basic Financial Instruments,* or, if it has significant influence in the joint venture, in accordance with Section 14, *Investments in Associates*.

1. Jointly controlled operations

   For jointly controlled operations, the venture should recognize assets that it controls and liabilities it incurs as well as its share of income earned and expenses that are incurred.

2. Jointly controlled assets

   For jointly controlled assets, the venture should recognize its share of the assets and liabilities it incurs as well as income it earns and expenses that are incurred.

3. Jointly controlled entities

   For investment in jointly controlled entities, there is an option for the venture to use:

   - Cost model

     Under the cost model, a venture shall measure its investment, other than those for which there is a published price quotation, at cost less any accumulated impairment losses. If there is a published price quotation, the fair value model shall be used. Under this model, the investor shall recognize distributions received from the investment as income without regard to whether the distributions are from accumulated profits of the jointly controlled entity arising from before or after the date of acquisition.

   - Equity method

     A venture shall measure its investment in jointly controlled entities by the equity method using the procedures in IFRS/PFRS for SMEs, Section 14, *Investments in Associates*, paragraph 14.8, *Equity Method* (substituting "joint control" where that paragraph refers to "significant influence."

   - Fair value model

     Under this method, the investment in a jointly controlled entity is recognized initially at transaction price, excluding any transaction costs.

     At each reporting date, a venture shall measure its investment at fair value, with changes in fair value recognized in profit or loss. Where

it is impracticable to measure fair value reliably without undue cost or effort, the cost model shall be used.

Accounting Treatment of Investment in Joint Venture by SME-Venturer			
	FAFVPL	Cost Method	Equity Method
Initial measurement	Fair Value	Historical Cost	Historical Cost or FVNAA, higher
Transaction Cost	Expense	Capitalizable	Capitalizable
Subsequent Measurement	Fair Value	Cost less impairment	Book Value under Equity Method less impairment
Gain or Loss on changes in fair value	Yes in P/L	None	None
Dividend Income from Investee	Yes	Yes	None (Deduction from Investment Account)
Share in NI(NL) OCI(OCL) of Investee	None	None	Yes
Impairment Loss	None	Yes if Book Value>Recoverable Amount	Yes if Book Value>Recoverable Amount

MULTIPLE CHOICE – Theory of Accounts

TOA 2-1 (IFRS)

It is an arrangement of which two or more parties have joint control.

a. Joint arrangement
b. Joint undertaking
c. Joint operation
d. Joint venture

TOA 2-2 (IFRS)

It is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

a. Joint control
b. Joint undertaking
c. Joint operation
d. Joint venture

TOA 2-3 (IFRS)

It is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement.

a. Joint control
b. Joint undertaking
c. Joint operation
d. Joint venture

TOA 2-4 (IFRS)

It is a party to a joint operation that has joint control of that joint operation.

a. Joint controller
b. Joint undertaker
c. Joint operator
d. Joint venturer

TOA 2-5 (IFRS)

It is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement.

a. Joint control
b. Joint undertaking
c. Joint operation
d. Joint venture

TOA 2-6 (IFRS)

It is a party to a joint venture that has joint control of that joint venture.
a. Joint controller
b. Joint undertaker
c. Joint operator
d. Joint venturer

TOA 2-7 (IFRS)

It is an entity that participates in a joint arrangement, regardless of whether that entity has joint control of the arrangement.
a. Partner
b. Party to a joint arrangement
c. Joint operator
d. Joint venturer

TOA 2-8 (IFRS)

It is a separately identifiable financial structure, including separate legal entities or entities recognized by statute, regardless of whether those entities have legal personality.
a. Separate vehicle
b. Party to a joint arrangement
c. Joint operator
d. Joint venture

TOA 2-9 (IFRS)

Which of the following is a characteristic of a joint arrangement?
a. The parties are bound by a contractual arrangement only.
b. The contractual arrangement gives two or more parties joint control over the arrangement only.
c. The parties are bound by a contractual arrangement and the contractual arrangement gives two or more parties joint control over the arrangement.
d. A joint arrangement is neither a joint operation nor joint venture.

TOA 2-10 (IFRS)

According to IFRS 11, Joint Arrangement, what is the method of accounting for investment in joint venture?

a. Proportionate consolidation method
b. Cost method
c. Equity method
d. Fair value method

TOA 2-11 (IFRS)

IFRS 11, Joint Arrangement, provides that the classification of the arrangements will require entities to apply judgment when assessing their rights and obligations arising from the arrangement by considering the following except

a. The terms agreed by the parties in the contractual arrangements.
b. The structure and legal form of the arrangement.
c. When structured in a legal entity, the choice between proportionate consolidation and the equity method.
d. When relevant, other facts and circumstances.

TOA 2-12 (IFRS)

IFRS 11, Joint Arrangement, provides that a joint operator shall recognize the following, in relation to its interest in a joint operation, except

a. Its expenses, including its share of any expenses incurred jointly.
b. Its liabilities, including its share of any liabilities incurred jointly.
c. Its interest as an investment using the equity method.
d. Its assets, including its share of any assets held jointly.

TOA 2-13 (Adapted)

A joint arrangement that is not structured through a separate vehicle is called:

a. A joint venture
b. A joint operation
c. An expense joint venture or a joint operation
d. A partnership

TOA 2-14 (Adapted)

Which of the following statements is in accordance with IFRS 11, Joint Arrangement?

a. Investors in jointly controlled entities account for their investment under equity method if their ownership percentage exceeds 20%.

b. The existence of a contractual arrangement distinguishes joint arrangements from investments in associates in which the investor has significant influence.
c. The contractual arrangement establishes joint control over the arrangement in such a way no single venturer is in a position to control the activity unilaterally.
d. Activities that have no contractual arrangement to establish joint control but in substance have established joint control are considered joint ventures for the purposes of IFRS 11.

TOA 2-15 (Adapted)

A venturer that recognizes in its financial statements the assets that it controls, the liabilities it incurs, the expenses that it incurs and its share of the income that it earns from the sale of goods or services by the joint venture is prescribed by IFRS 11 for which type(s) of joint venture(s)?

a. Jointly controlled entities
b. Jointly controlled assets
c. Joint operations
d. Jointly controlled assets and jointly controlled operations

TOA 2-16 (Adapted)

Where a joint venture is a partnership

a. It should be accounted for by the venturer using the equity method.
b. It should be accounted for using full consolidation accounting.
c. It should be accounted for the venturer as a partnership and the line item added into the group's financial statements.
d. It should be accounted for by the venture using partnership accounting separately to the financial accounts of the venture and any profit on sale of the output from the joint venture reported in the income statement of the individual venturers.

TOA 2-17 (Adapted)

Where joint operators contribute assets to a joint venture, the accounting treatment is which of the following?

a. Treat the contribution as a capital investment and replace the asset with an investment account – "Advances to Joint Venture."
b. Close the accumulated depreciation account if applicable to the asset account and remove the net book value of the other joint venturers' shares of the asset against the account "Advances to Joint Venture."
c. The asset is restated to fair value and the asset revaluation reserve treated as part of the "Advances to Joint Venture."
d. The value of the contribution is assessed at fair value, with the difference between fair value and the carrying amount being treated as a profit or loss on sale.

MULTIPLE CHOICE – Problems

PROB. 2-1 (Adapted)

On January 1, 2020, Cream Co. and Nichols Co. enter into a contractual agreement to form a joint arrangement deemed to be a joint operation. Their agreement provides that Cream will contribute land with a fair value of P9,000,000 (book value P8,000,000) and machinery with a fair value of P3,000,000 (net book value P2,000,000); while Nichols will contribute P8,000,000 in cash. It was further agreed that they will share output, assets and future contributions in the ratio of 60:40 for Cream and Nichols, respectively.

What are the journal entries to record the formation of the joint operation in the books of Cream and Nichols?

a.	Cream's Books		
	Investment in joint operations	4,000,000	
	Land		3,200,000
	Machinery		800,000
	Nichols' Books		
	Land	3,600,000	
	Machinery	1,200,000	
	Investment in joint operations		4,800,000
b.	Cream's Books		
	Investment in joint operations	4,800,000	
	Land		3,600,000
	Machinery		1,200,000
	Nichols' Books		
	Investment in joint operations	4,800,000	
	Cash		4,800,000

.c.	Cream's Books		
	Cash	4,800,000	
	Land		3,200,000
	Machinery		800,000
	Profit on sale of land		400,000
	Profit on sale of machinery		400,000

	Nichols' Books		
	Land	3,600,000	
	Machinery	1,200,000	
	Cash		4,800,000

d.	Cream's Books		
	Investment in joint operations	4,800,000	
	Land		3,200,000
	Machinery		800,000
	Asset revaluation reserve		800,000
	Nichols' Books		
	Investment in joint operations	4,800,000	
	Cash		4,800,000

PROB. 2-2 (Adapted)

On January 1, 2020, Pork Ltd, Tower Ltd, and Hook Ltd. entered into a joint operation to produce low-cost suits. The joint operators equally share in output and costs. On the same date, the recorded amounts of each joint operator's contributions are as follows:

	Pork Ltd	Tower Ltd	Hook Ltd
Machinery at cost	900,000		
Equipment at cost		600,000	
Accumulated depreciation	200,000	100,000	
Cash			600,000
Agreed value	600,000	600.000	600.000

Assume that agreed values equal recoverable amount and no revaluation have occurred. Which of the following combinations correctly indicates the effects on the statement of financial position and statement of financial performance of Tower Ltd, respectively, after recording the journal entries to account for this joint operation arrangement?

a. No change; no change.
b. Asset increase; profit increase.
c. Asset decrease; profit decrease.

d. Asset increase; profit decrease.

PROB. 2-3 (Adapted)

On January 1, 2020, Pork Ltd, Tower Ltd, and Hook Ltd. entered into a joint operation to produce low-cost suits. The joint operators equally share in output and costs. On the same date, the recorded amounts of each joint operator's contributions are as follows:

	Pork Ltd	Tower Ltd	Hook Ltd
Machinery at cost	900,000		
Equipment at cost		600,000	
Accumulated depreciation	200,000	100,000	
Cash			600,000
Agreed value	600,000	600.000	600.000

Assume that agreed values equal recoverable amount and no revaluation have occurred. Which of the following combinations correctly indicates the effects on the statement of financial position and statement of financial performance of Hook Ltd, respectively, after recording the journal entries to account for this joint operation arrangement?

a. No change; no change.
b. Asset increase; profit increase.
c. Asset decrease; profit decrease.
d. Asset increase; profit decrease

PROB. 2-4 (Author)

Entity A and Entity B incorporated Entity C to manufacture a microchip to be used by the incorporating entities as component for their final products of cellular phones and tablets.

The contractual agreement of the incorporating entities provides that the decisions on relevant activities of Entity C will require the unanimous consent of both entities.

Entity A and Entity B have rights to the assets, and obligations for the liabilities, relating to the arrangement. The capital stocks of Entity C will be owned by Entity A and Entity B in the ratio of 60:40. At the end of first operation of Entity C, the financial statements provided the following data:

Inventory	P 1,000,000	Accounts payable	P 2,000,000
Land	3,000,000	Notes payable	1,000,000
Building	5,000,000	Loans payable	4,000,000
		Share capital	1,000,000
		Retained earnings	1,000,000
		Sales revenue	5,000,000

The contractual agreement of Entity A and Entity B also provides for the following concerning the assets and liabilities of Entity C:

- Entity A owns the land and incurs the loans payable of Entity C.
- Entity B owns the building and incurs the notes payable of Entity C.
- The other assets and liabilities are owned or owed by Entity A and Entity on the basis of their capital interest in Entity C.
- The sales revenue of Entity C includes sales to Entity A and Entity B in the amount of P1,000,000 and P2,000,000, respectively. As of the end of the first year, Entity A and Entity B was able to resell 30% and 60% of the inventory coming from Entity C to third persons.

a. What is the amount of total assets to be reported by Entity A concerning its interest with Entity C?
   a. 5,400,000
   b. 3,000,000
   c. 3,600,000
   d. 5,000,000

b. What is the amount of total liabilities to be reported by Entity B concerning its interest with Entity C?
   a. 1,800,000
   b. 2,200,000
   c. 2,800,000
   d. 2,400,000

c. What is the amount of sales revenue to be reported by Entity A concerning its interest with Entity C?
   a. 2,300,000
   b. 2,100,000
   c. 3,000,000
   d. 2,500,000

d. What is the amount of sales revenue to be reported by Entity B concerning its interest with Entity C?
   a. 2,000,000
   b. 1,200,000
   c. 1,600,000
   d. 1,400,000

PROB. 2-5 (Author)

On January 1, 2021, Entity A, a public entity and Entity B, a public entity incorporated Entity C which has its fiscal and operational autonomy. The contractual agreement of the incorporating entities provides that the decisions on relevant activities of Entity C will require the unanimous consent of both entities. Entity A and Entity B will have rights to the net assets of Entity C.

Entity A and Entity B invested P1,000,000 and P1,500,000, respectively, equivalent to 40:60 capital interest of Entity C.

The financial statements of Entity C provide the following data for its three-year operation:

	Year 2021	Year 2022	Year 2023
Net Income (Net Loss)	P 200,000	(P 3,000,000)	P 5,000,000
Dividends declared	100,000	-	1,000,000

a. What is the balance of Investment in Entity C to be reported by Entity A in its Statement of Financial Position on December 31, 2021?
   a. 1,000,000
   b. 1,040,000
   c. 1,080,000
   d. 1,200,000

b. What is the investment loss to be reported by Entity B concerning its interest in Entity C for the year ended December 31, 2022?
   a. 1,560,000
   b. 1,800,000
   c. 1,620,000
   d. 1,500,000

c. What is the investment income to be reported by Entity A concerning its interest in Entity C for the year ended December 31, 2023?
   a. 2,000,000
   b. 1,900,000
   c. 1,920,000
   d. 1,840,000

d. What is the balance of Investment in Entity C to be reported by Entity B in its Statement of Financial Position on December 31, 2023?
   a. 2,400,000
   b. 3,000,000
   c. 2,760,000
   d. 2,160,000

PROB. 2-6 (Author)

On January 1, 2020, Entity A, a public entity and Entity B, a public entity incorporated Entity C by investing P3,000,000 and P2,000,000 for capital interest ratio of 60:40. The contractual agreement of the incorporating entities provides that the decisions on relevant activities of Entity C will require the unanimous consent of both entities. Entity A and Entity B will have rights to the net assets of Entity C.

The financial statements of Entity C provide the following data for its two-year operation:

- Entity C reported net income (net loss) in the amount of P1,000,000 and (P500,000) for year 2020 and 2021, respectively, and declared dividends in the amount of P400,000 and P100,000 for year 2020 and 2021, respectively.
- During 2020, Entity C sold inventory to Entity A with gross profit of P50,000. 80% of those inventories were resold by Entity A to third persons during 2020 and the remainders were resold to third persons during 2021.
- On July 1, 2020, Entity C sold a machinery to Entity B at a loss of P20,000. At the time of sale, the machinery has remaining useful life of 2 years.

a. What is the investment income to be reported by Entity A for the year ended December 31, 2020?
   a. 603,000
   b. 606,000
   c. 594,000

d. 597,000

b. What is the investment loss to be reported by Entity B for the year ended December 31, 2021?
   a. (200,000)
   b. (196,000)
   c. (204,000)
   d. (202,000)

c. What is the balance of Investment in Entity C to be reported by Entity A on December 31, 2021?
   a. 3,000,000
   b. 2,940,000
   c. 3,020,000
   d. 3,120,000

PROB. 2-7 (Author)

On January 1, 2020, Entity A and Entity B, both SMEs, incorporated Entity C, a jointly controlled entity by investing P500,000 each in exchange for 10,000 ordinary shares each of Entity C. Entity A and Entity B each incurred P20,000 transaction costs. The contractual agreement of the incorporating entities provides that the decisions on relevant activities of Entity C will require the unanimous consent of both entities. Entity A and Entity B will have rights to the net assets of Entity C.

For the year ended December 31, 2020, Entity C reported net income of P100,000 and declared dividends in the amount of P30,000.

On December 31, 2020, the shares of stocks of Entity C are quoted at P56.

a. If Entity A elected fair value model to account its investment in Entity C, what is the net effect in Entity A's profit or loss for the year ended December 31, 2020?
   a. 55,000 net profit
   b. 60,000 net profit
   c. 15,000 net profit
   d. 40,000 net profit

b. If Entity B elected equity method to account its investment in Entity C, what is the book value of Entity B's Investment in Entity C on December 31, 2020?
   a. 520,000
   b. 540,000
   c. 535,000
   d. 555,000

PROB. 2-8 (Author)

On January 1, 2020, Entity A and Entity B, both SMEs, incorporated Entity C, a jointly controlled entity by investing P200,000 each in exchange for 20,000 ordinary shares each of Entity C. Entity A and Entity B each incurred P10,000 transaction costs.

The contractual agreement of the incorporating entities provides that the decisions on relevant activities of Entity C will require the unanimous consent of both entities. Entity A and Entity B will have rights to the net assets of Entity C.

For the year ended December 31, 2020, Entity C reported net income of P50,000 and declared dividends in the amount of P10,000.

On December 31, 2020, the investment in Entity C has value in use of P215,000.

a. If Entity A elected cost method to account its Investment in Entity C, what is the book value of Entity A's Investment in Entity C on December 31, 2020?
   a. 210,000
   b. 215,000
   c. 230,000
   d. 200,000

b. If Entity B elected equity method to account its Investment in Entity C, what is the net effect in Entity B's profit or loss for the year ended December 31, 2020?
   a. 25,000 net profit
   b. 5,000 net profit
   c. 10,000 net profit
   d. 15,000 net profit

ANSWERS – Theory of Accounts

TOA 2-1 *Suggested answer (a) Joint arrangement*

TOA 2-2 *Suggested answer (a) Joint control*

TOA 2-3 *Suggested answer (c) Joint operation*

TOA 2-4 *Suggested answer (c) Joint operator*

TOA 2-5 *Suggested answer(d) Joint venture*

TOA 2-6 *Suggested answer (d) Joint venturer*

TOA 2-7 *Suggested answer (b) Party to a joint arrangement*

TOA 2-8 *Suggested answer (a) Separate vehicle*

TOA 2-9 *Suggested answer (c)*

IFRS 11 provides the following characteristics of a joint arrangement:

1. *The parties are bound by a contractual arrangement.*
2. *The contractual arrangement gives two or more of those parties joint control of the arrangement.*

TOA 2-10 *Suggested answer (c) Equity method*

IFRS 11 requires the use of the equity method of accounting for interest in joint ventures thereby eliminating the accounting policy choice of proportionate consolidation method.

TOA 2-11 *Suggested answer (c) When structured in a legal entity, the choice between proportionate consolidation and the equity method.*

As illustrated in the four steps process mentioned earlier, the existence of a separate vehicle is a necessary but not a sufficient condition for a joint arrangement to be considered a joint venture. In the absence of a separate vehicle, IFRS 11 clearly provides that the parties to the joint arrangement who have direct rights and obligations to the assets and liabilities of the arrangement will be classified as a joint operation.

However, in an arrangement with a separate vehicle, all relevant facts and circumstances should be considered in determining whether the parties to the arrangement have rights to the net assets of the arrangement. Therefore, the choice between proportionate consolidation and the equity method is not considered when making the assessment.

TOA 2-12 *Suggested answer (c) Its interest as an investment using the equity method.*

IFRS 11 provides that a joint operator shall recognize the following in relation to its interest in a joint operation:

1. *Its assets, including its share of any assets held jointly.*
2. *Its liabilities, including its share of any liabilities incurred jointly.*
3. *Its revenue from the sale of its share of the output arising from the joint operation.*
4. *Its share of the revenue from the sale of the output by the joint operation.*
5. *Its expenses, including its share of any expenses incurred jointly.*

Therefore, a joint operator should not recognize its interest as an investment using the equity method in relation to its interest in a joint operation.

TOA 2-13 *Suggested answer (b) Joint operation*

IFRS 11, paragraph B16 states that a joint arrangement that is not structured through a separate vehicle is a joint operation. In such case, the contractual arrangement establishes the parties' rights to the assets, and obligations for the liabilities, relating to the arrangement, and the parties' rights to the corresponding revenues and obligations for the corresponding expenses.

TOA 2-14 *Suggested answer (c)The contractual arrangement establishes joint control over the arrangement in such a way no single venturer is in position to control the activity unilaterally.*

IFRS 11, paragraphs 7-13 provides that in joint arrangement, no single party controls the arrangement on its own. The contractual arrangement gives two or more of those parties joint control of the arrangement.

TOA 2-15 *Suggested answer (c) Joint operations*

IFRS 11, paragraph 20 states that in joint operations, the parties share all interests in the assets in a specified proportion, share all liabilities, obligations, costs and expenses in a specified proportion, as in the case of rights to assets. The contractual arrangement usually establishes the allocation of revenues and expenses on the basis of the relative contribution or consumption of each party to the joint arrangement.

TOA 2-16 *Suggested answer (a) It should be accounted for by the venture using the equity method.*

A joint venture shall recognize its interest in a joint venture as an investment and shall account for that investment using the equity method in accordance with IAS 28 unless the entity is exempted from applying the equity method as specified in that standard.

TOA 2-17 *Suggested answer (d)*

Where joint operators make contributions of assets to the joint venture, ***the value of the contribution is assessed at fair value.*** *The transfer of assets is typically treated as sale of the ownership proportion of the asset given up.* ***Any resulting difference between the carrying amount and the fair value of the asset is treated as a profit or loss on sale.***

SOLUTIONS – Problems

PROB 2-1 *Suggested answer (c)*

c.	Cream's Books		
	Cash (8,000,000 x 60%)	4,800,000	
	Land (8,000,000 x 40%)		3,200,000
	Machinery (2,000,000 x 40%)		800,000
	Profit on sale of land (1,000,000 x 40%)		400,000
	Profit on sale of machinery (1,000,000 x 40%)		400,000

	Nichols' Books		
	Land (9,000,000 x 40%)	3,600,000	
	Machinery (3,000,000 x 40%)	1,200,000	
	Cash (8,000,000 x 60%)		4,800,000

IFRS 11 provides that when an entity enters into a transaction with a joint operation in which it is a joint operator, such as sale or contribution of asset, it is conducting the transaction with the other parties to the joint operation and, as such, the joint operator shall recognize gains and losses resulting from such transaction only to the extent of the other parties' interests in the joint operations.

In other words, the value of the asset contributed is assessed at fair value. The transfer is deemed sale of the ownership proportion of the asset given up. The difference between the carrying value and fair value of the asset is recognized as gain or loss on sale only to the extent of other parties' interest in the joint operations.

PROB. 2-2 *Suggested answer (b) Asset increase; profit increase*

IFRS 11 explicitly provides that a joint operator shall recognize in relation to its interest in a joint operation:

a. Its assets including its share of any assets held jointly.
b. Its liabilities including its share of any liabilities incurred jointly.
c. Its revenue from the sale of its share of the output arising from the joint operation.

d. Its share of the revenue from the sale of the output by the joint operation.
e. Its expenses including its share of any expenses incurred jointly.

The joint operators' interest in assets contributed shall be recorded based on their initial agreement (agreed value) relating to their total contribution. Thus, the asset of Tower shall increase from the carrying amount of P500,000 to agreed value of P600,000.

Any difference between the carrying amount and fair value (agreed value) of the asset contributed is recognized as gain or loss on sale. The excess of agreed value of P600,000 over the carrying amount of P500,000is considered as gain; thus, an increase in profit.

PROB. 2-3 *Suggested answer (a) No change; no change*

Again, IFRS 11 explicitly provides that a joint operator shall recognize in relation to its interest in a joint operation:
a. Its assets including its share of any assets held jointly.
b. Its liabilities including its share of any liabilities incurred jointly.
c. Its revenue from the sale of its share of the output arising from the joint operation.
d. Its share of the revenue from the sale of the output by the joint operation.
e. Its expenses including its share of any expenses incurred jointly.

The amount of cash contributed by Hook Ltd is its agreed value. The carrying amount is the same as the agreed value; thus, no change in asset and no change in profit.

PROB. 2-4

a. Suggested answer: (c) 3,600,000

Land owned by Entity A	3,000,000
Add Interest of Entity A on co-owned inventory (1,000,000 x 60%)	600,000
Total assets to be reported by Entity A concerning its interest in Entity C	3,600,000

b. Suggested answer (a) 1,800,000

Notes payable owed by Entity B	1,000,000
Add Interest of Entity B on co-owned accounts Payable (2,000,000 x 40%)	800,000
Total liabilities to be reported by Entity B Concerning its interest in Entity C	1,800,000

c. Suggested answer: (b) 2,100,000

Sales revenue reported by Entity C		5,000,000
Less: Unsold inventory of Entity A coming from Entity C (1,000,000 x 70%)	700,000	
Unsold inventory of Entity B coming from Entity C (2,000,000 x 40%)	800,000	1,500,000
Sales revenue to third persons		3,500,000
Sales revenue to be reported by Entity A (3,500,000 x 60%)		2,100,000

d. Suggested answer: (d) 1,400,000

Sales revenue to be reported by Entity A (3,500,000 x 40%)	1,400,000

PROB. 2-5 *Suggested answer*

a. Suggested answer: (b) 1,040,000

Initial measurement of Investment in Entity C (Entity A's book) on January 1, 2021	1,000,000
Add 2021's share in net income of Entity C (Joint venture) (200,000 x 40%)	80,000
Total	1,080,000
Less 2021's dividend received from Entity C (100,000 x 40%)	40,000
Book value of investment in Entity C	

(Equity method) December 31, 2021	1,040,000

b. *Suggested answer: (a) 1,560,000*

Initial measurement of Investment in Entity C (Entity B's book) on January 1, 2021	1,500,000
Add 2021s share in net income of Entity C (Joint Venture) (200,000 x 60%)	120,000
Total	1,620,000
Less 2021's dividend received from Entity C (100,000 x 60%)	60,000
Boo value of Investment in Entity C (Entity B's book)	1,560,000
Possible share in net loss for year 2022 for Entity B (3,000,000 x 60%)	1,800,000
Maximum investment loss is the book value of Investment account	1,560,000

c. *Suggested answer (d) 1,840,000*

Possible share in net income for the year 2023 For Entity A (5,000,000 x 40%)	2,000,000
Less Unrecognized share in net loss for year 2022for Entity A [(3,000,000 x 40%) – 1,040,000]	160,000
Investment income for year 2023 for Entity A	1,840,000

d. *Suggested answer (d) 2,160,000*

Book value of Investment in Entity C (Entity B's book)	0
Add 2023's share in net income	2,760,000
Total	2,760,000
Less 2023's dividend received from Entity C (1,000,000 x 60%)	600,000
Book value of Investment in Entity C (B's book)	2,160,000

PROB. 2-6

a. *Suggested answer: (c) 594,000*

Unadjusted investment income of Entity A for year 2020 (1,000,000 x 60%)	600,000
Less unrealized gross profit in ending inventory of Entity A (50,000 x 20% x 60%)	6,000
Adjusted investment income of Entity A for 2020	594,000

b. *Suggested answer (c) 204,000*

Unadjusted investment loss for year 2021 (500,000 x 40%)	(200,000)
Add realized loss on sale of machinery (20,000/2 x 40%)	(4,000)
Adjusted investment loss of Entity B for year 2021	(204,000)

c. *Suggested answer (a) 3,000,000*

Initial measurement of Investment in Entity C (Entity A's Book)		3,000,000
Add: 2020's investment income	594,000	
Realized gross profit on beginning Inventory (50,000 x 20% x 60%)	6,000	600,000
Total		3,600,000
Less: 2020's dividend received from Entity C (400,000 x 60%)	240,000	
Unadjusted investment loss of Entity A For 2021 (500,000 x 60%)	300,000	
2021's dividend received from Entity C (100,000 x 60%)	60,000	600,000
Book value of investment in Entity C (A's book) December 31, 2021		3,000,000

a. Suggested answer (a) 35,000

Transaction costs – Expense as incurred under the Fair value model (20,000 x 2)	(40,000)
Unrealized holding gain on changes in fair value (560,000 – 500,000)	60,000
Dividend income (30,000 x 50%)	15,000
Effect in net profit under the fair value model	35,000

b. Suggested answer (d) 555,000

Initial measurement of Investment under Equity method (500,000 + 20,000)	520,000
Add share in net income of joint venture (100,000 x 50%)	50,000
Total	570,000
Less dividend received from joint venture (30,000 x 50%)	15,000
Book value of investment (Equity method) Dec. 31, 2020	555,000

Note: There is no impairment loss because fair value less cost to sell of P560,000 is higher than book value.

PROB. 2-8 *Suggested answer*

a. Suggested answer (a) 210,000

Book value of Investment under the cost method (200,000 + 10,000)	210,000

b. Suggested answer (c) 10,000

Share in net income of joint venture (50,000 x 50%)	25,000
Impairment loss of investment under equity method (230,000 – 215,000)	(15,000)
Effect of net profit under the equity method	10,000

Chapter 3

ACCOUNTING FOR HOME OFFICE, BRANCH AND AGENCY TRANSACTIONS

Introduction

As a means of achieving marketing objectives, selling units in form of *agency* or a *branch* may be established. The distinction between an agency and a branch is based upon the functions assigned to the organization as well as the degree of independence that it assumes in the exercise of such functions. an organization that merely takes orders for goods, carries no stock other than samples, and that operates under the direct supervision of the home office is called an agency; while an organization that sells goods out of a stock that it maintains and that possesses the authority to engage in transactions as an independent business unit is called a *branch.*

ACCOUNTING FOR BRANCHES

Although a branch operates as a separate business unit, it is subject to control by the home office. A branch's cash, merchandise, and other assets, as may be needed, are supplied by the home office. The branch may purchase merchandise from outsiders to satisfy certain local needs for goods not available from the affiliated unit.

Generally, the branch accounting system is maintained at the branch. Periodic financial statements are prepared by the branch for submission to the home office. When complete self-balancing books are kept by the branch, an account called Home Office Current takes the customary capital accounts (credit account). The home office, in turns, keeps a reciprocal account, called Branch Current or Investment in Branch account (debit account).

ADJUSTMENT OF RECIPROCAL ACCOUNT

The balances in the Branch Current account in the home office books and Home Office Current account in the branch books may not show identical balances at any one time, because of certain interoffice data that have been recorded by one office but

not by the other. The fact that the reciprocal account balances are not identical is of no concern during the fiscal period; however, at the end of the fiscal period, appropriate journal entries should be made to bring interoffice accounts into agreement for purposes of individual and combined financial statements.

The data to be considered in reconciling the two reciprocal accounts may be classified as follows:

1. Debits in the branch account without corresponding credits in the home office account. (e.g. shipment of merchandise in transit)
2. Credits in the branch account without corresponding debits in the home office account. (e.g. branch's accounts receivable collected by the home office)
3. Debits in the home office account without corresponding credits in the branch account. (e.g. cash remittance of the branch to home office in transit)
4. Credits in the home office account without corresponding debits in the branch account. (e.g. correction of account for the understatement of net income for the preceding period)

Reciprocal Accounts

- Separate Statement of Financial Position of Home Office - Investment in Branch Account (Asset Account with normal balance of debit)
- Separate Statement of Financial Position of Branch - Home Office Account (Equity or Capital Account with normal balance of credit)
- Separate Income Statement of Home Office - Shipment to Branch Account reported by Home Office at its cost but with Allowance for Overvaluation Account.
- Separate Income Statement of Home Office - Allowance for Overvaluation Account which refers to overvaluation of the ending inventory of the branch coming from home office a.k.a. unrealized profit in ending inventory of the branch for goods coming from home office.
- Separate Income Statement of Branch - Shipment from Home Office Account reported by branch at its cost which is the billed price of the home office.

Measurement of Inventory of The Company

- Separate Statement of Financial Position of Branch - Inventories coming from outsiders are properly measured at cost while inventories coming from home office are measured at billed price made by the home office.
- Combined Statement of Financial Position of the Company - PAS 2 requires inventories to be measured subsequently at lower or cost or net realizable value. Thus, overvaluation in ending inventories of the branch for those goods coming from home office shall be eliminated.

BRANCH BILLING AT AN AMOUNT ABOVE COST

When home office bills the branch for merchandise at a figure other than cost, billing is usually made at an arbitrary rate above cost or at the retail sales price.

In order to withhold from branch complete information concerning the actual earnings from branch operation, billing by the home office may be made at an amount above cost. When billings to the branch exceed cost, the earnings determine by the branch will be less than actual earnings; and the inventories reported by the branch at the billed prices will exceed cost. The difference between the billed price recorded by the branch and the cost of the goods shipped recorded by the home office is credited to Unrealized Intercompany Inventory Profit (Allowance for Overvaluation of Branch Inventory). And these factors must be recognized by the home office and given effect upon its accounting records in summarizing branch operations.

PREPARATION OF COMBINED STATEMENTS

Although separate statements offer significant information to both home office and branch, such statements must be combined in fully stating a company's financial position and results of its operations. The financial position of the business unit as a whole is fully presented only when the individual asset and liability items of the branch are substituted for the branch investment balances and combined with the home office items. Operating results for the businesses as a whole are fully presented only when the individual revenue and expenses of the branch are substituted for the branch net income or loss and combined with the home office items.

In combining branch data with home office, the elimination of certain reciprocal interoffice items is necessary. Since reciprocal accounts are without significance when the related units are recognized as single entity, in preparing a combined balance sheet, the home office account and the branch account, and other interbranch receivables and payables, are eliminated. In preparing a combined income statement, the reciprocal accounts Shipments from Home Office and Shipments to Branch are eliminated, since these balances summarize interoffice transfers that are of no significance when the related units are reported as a single entity. Other interoffice revenue and expense items are also eliminated so that the combined statement may report only the results of transactions with outsiders.

When goods are billed to a branch at an amount above cost, the ending inventory on the branch balance sheet, reported at an amount above cost, must be restated in terms of cost in preparing the combined balance sheet. The beginning and ending inventories on the branch income statement will require restatement to cost, and the Unrealized Intercompany Inventory Profit (Allowance for Overvaluation of Branch Inventory) must be eliminated for purposes of preparing the combined income statement.

MULTIPLE CHOICE – Theory of Accounts

TOA 3 - 1 (AICPA)

An enterprise uses a branch accounting system in which it establishes separate formal accounting systems for its home office operations and its branch office operations. Which of the following statements about this arrangement is false?

a. The home office account on the books of a branch office represents the equity interest of the home office in the net assets of the branch.
b. The branch office account on the books of the home office represents the equity interest of the branch office in the net assets of the home office.
c. The home office and branch office accounts are reciprocal accounts that must be eliminated in the preparation of the enterprise's financial statements that are presented in accordance with GAAP.
d. Unrealized profit from internal transfers between the home office and a branch must be eliminated in the preparation of the enterprise's financial statements that are presented in accordance with GAAP.

TOA 3-2 (Adapted)

Which of the following is the only reason why a home office cannot report inventory shipments to a branch as sales?

a. The inventory transfer is a transaction with a related party.
b. There is no practicable means of determining whether the transfer prices approximate those that would occur in an arms-length transaction between independent parties.
c. Only inventory transaction between the company and outside third parties can be considered sales.
d. The principles of conservatism.

TOA 3-3 (Adapted)

In Home Office and Branch merchandise transfers, the use of a Shipments to Branch account by the Home Office and the use of a Shipments from Home office account by the branch indicate that the inventory system employed

a. Is a perpetual inventory system.
b. Is a periodic inventory system.

c. Is neither perpetual not periodic inventory system.
d. Cannot be determined from the information provided.

TOA 3-4 (AICPA)

The combined statements may be used to present the results of operations of

	Entities under common management	Commonly controlled entities
a.	No	Yes
b.	Yes	No
c.	No	No
d.	Yes	Yes

TOA 3-5 (Adapted)

The home office bills its branch for merchandise transfers at a price in excess of cost. In the home office separate financial statements, the allowance for unrealized profit in branch inventory account would appear in the financial statements of the home office as

a. An operating expense of the current period.
b. Deduction from the cost of goods sold.
c. Addition to the cost of goods sold.
d. Deduction from the investment in branch account.

MULTIPLE CHOICE – Problems

PROB. 3-1 (Adapted)

Zeta Corp. established an agency in Baguio City. For the first month of operation, the agency transactions were summarized as follows:

Receipts from sales	350,000
Disbursements for:	
Purchases	400,000
Rent	20,000
Advertising supplies	10,000
Salaries and commissions	70,000
Other expenses	5,000

At the end of that month, the agency had P100,000 of receivables and P50,000 of payables. Also, there were P90,000 of unsold merchandise and P6,000 of unused advertising supplies on hand. The Baguio City agency was conceived as an experiment and it is the intention of management to close it if its operations prove to be unprofitable. What is the result of operations of the Baguio City agency?

a. No profit, no loss.
b. P 25,000 profit
c. P 9,000 loss
d. P 155,000 loss

PROB. 3-2 (RPCPA)

Gershwin Inc. opens a sales agency in Cebu City and a working fund of P20,000 is established on imprest basis. The first payment from the fund is P3,000 for rent. The transaction should be recorded by the home office as follows:

		Debit	Credit
a.	No entry		
b.	Rent	P3,000	
	Cash		P3,000
c.	Cebu agency	3,000	
	Working fund		3,000

d.	Cebu agency	3,000	
	Cash		3,000

PROB. 3 - 3 (AUTHOR)

An entity set up a branch in Makati. The branch has been in operation already for two years. The home office and branch accounts are in balance at the beginning of the current year.

The home office account has a balance of P250,000 at the end of the current year. At the end of the current year, the accountant discovered the following transactions:

1. Makati branch returned an inventory shipped by the home office at cost. Such inventory costing P20,000 is still in transit at the end of the current year.

2. Inventory costing P10,000 intended for Manila branch was actually received by Makati branch.

3. Inventory costing P30,000 intended for Makati branch was actually received by Marikina branch.

4. Manila branch collected P40,000 receivables of Makati branch without notifying the home office.

5. Marikina branch paid P50,000 payables of Manila branch without notifying the home office.

6. Makati branch collected P60,000 receivables of Home Office without notifying the home office.

7. The home office collected the P70,000 receivables of Marikina branch without notifying the said branch.

8. Manila branch sent a P10,000 debit memo to home office which is debited twice by the home office in the amount of P20,000.

9. The home office sent a P20,000 credit memo to Makati branch which is credited by the said branch in the amount of P10,000.

10. The P20,000 net income of the branch was erroneously credited by the home office to branch account at P30,000.

1. What is the adjusted balance of the home office account at the end of the current year?
   a. 260,000
   b. 240,000
   c. 220,000
   d. 230,000

2. What is the unadjusted balance of branch account at the end of the current year?
   a. 190,000
   b. 210,000
   c. 240,000
   d. 170,000

PROB. 3-4 (Adapted)

The home office of Mang Do Co. ships goods to Iloilo branch billing the branch for the goods at P45,000, excluding freight of P6,000. Upon receipt of the goods, Iloilo branch was instructed by the home office to transfer these goods to Cagayan de Oro branch. Iloilo branch ships the goods and paid P4,500 for the transfer. If the goods had been shipped by the home office directly to Cagayan de Oro branch, the freight would have been P6,500.

a. What is the journal entry to record receipt of shipment in the books of Cagayan de Oro branch?

a.	Shipment from home office	45,000	
	Home office current		45,000
b.	Shipment from home office	45,000	
	Freight in	6,000	
	Home office current		51,000
c.	Shipment from home office	45,000	
	Freight in	6,500	
	Home office current		51,500
d.	Shipment from home office	45,000	
	Freight in	4,500	
	Home office current		49,500

b. What is the adjusting journal entry to be recorded by Iloilo branch?

a.	Home office current	51,500	
	Shipment from home office		45,000
	Freight in		6,000
b.	Home office current	47,000	
	Shipment from home office		45,000
	Freight in		2,000
c.	Home office current	55,500	
	Shipment from home office		45,000
	Freight in		6,000
	Cash		4,500
d.	Shipment from home office	45,000	
	Freight in	6,000	
	Home office current		51,000

c. What is the adjusting entry to be recorded by home office?

a.	Shipment to Iloilo	45,000	
	Excess freight on interbranch transfer of merchandise	2,000	
	Cagayan de Oro branch current	45,000	
	Freight in	4,000	
	Shipment to Cagayan de Oro		45,000
	Iloilo branch current		51,000
b.	Shipment to Iloilo	45,000	
	Excess freight on interbranch transfer of merchandise	6,000	
	Iloilo branch current	45,000	51,000
c.	Shipment to Iloilo		
	Excess freight on interbranch transfer of merchandise	6,000	
	Cagayan de Oro branch current	45,000	
	Iloilo branch current		51,000
	Shipment to Cagayan de Oro		45,000
d.	Cagayan de Oro branch current	51,500	
	Shipment to Iloilo	45,000	
	Excess freight on interbranch transfer of merchandise	4,000	
	Iloilo branch current		55,500
	Shipment to Cagayan de Oro		45,000

PROB. 3 - 5 (RPCPA)

Vivaldi & Co. has several branches located in key cities in the south namely, Cebu, Mactan, Iloilo, Bacolod, Davao, and Cagayan de Oro. It authorizes transfers of cash and inventories among branches. The head office ships goods (P10,000 cost) to Cebu branch paying freight for P600. The home office authorizes the transfer of goods from Cebu branch to Davao branch where the latter is charged for the cost of the goods (P10,000) and freight charge (P200) for the transfer. If the shipment had been made by the home office directly to the Davao branch, the freight charge would have been P900. The transfer resulted to difference in freight charge which should be disposed of as follows:

a. P100 savings.
b. P100 charge to Davao branch by Cebu branch.
c. P100 charge to Davao branch by Head Office.
d. P100 to be equally charge among head office, Cebu branch and Davao branch.

PROB. 3 - 6 (RPCPA)

Selected balances from the Amorsolo Company's Branches A and B are as follows:

	Branch A	Branch B
Inventory, Jan. 1, 2019	P21,000	P19,000
Imprest branch fund	2,000	1,500
Inventory, Dec. 31, 2019	19,000	12,000
Accts. Rec., Jan. 1, 2019	55,000	43,500
Accts. Rec., Dec. 31, 2019	70,000	53,500
Mdse. from home office	61,000	47,000
Cash collections	85,000	70,000
Sales	100,000	80,000
Cash expenses	21,000	14,300

All sales, collections, and expenses are handled at the branch. All cash received from sales and collections are sent directly to the home office. Expenses are paid by the branch from the imprest fund and immediately reimbursed by the home office and credited to the Home Office account. All expenses paid by the branch are recorded in the branch books.

a. The net profit of branch A is:
   a. 16,000
   b. 21,000
   c. 15,000
   d. 18,000

b. The balance of the Home Office account of Branch A on January 1, 2019 is:
   a. 80,000
   b. 64,000
   c. 78,000
   d. 75,000

c. The balance of the Home Office account of Branch B on January 1, 2019 is:
   a. 80,000
   b. 64,000
   c. 78,000
   d. 95,000

d. The balance of the Branch Current account of Branch B on December 31, 2019 is:
   a. 70,000
   b. 64,000
   c. 67,000
   d. 65,000

e. The entry in Branch B records to update the reciprocal account Home Office Current on December 31, 2019, is:
   a. Dr. - Home Office/ Cr. – Profit & Loss
   b. Dr. - Profit & Loss/ Cr. – Branch Current
   c. Dr. - Branch Current/ Cr. – Profit & Loss
   d. Dr. - Profit & Loss/ Cr. – Home Office Current

PROB. 3 - 7 (RPCPA)

On December 31, 2019, the following data are in the records of the Angeles City branch of the Big & Small Company:

Petty cash	P 94,500
Accts. Rec. Dec. 31, 2018	85,200
Mdse. Inventory, Dec. 31, 2018	75,500

Accts. Rec. Dec. 31, 2019	88,800
Mdse. Inventory, Dec. 31, 2019	81,000
Sales	272,700
Sales returns	4,800
Accts. receivable written off	2,000
Shipment from Home Office	220,600
Expenses (paid by home office)	22,500

If all cash collections in 2019 were remitted to home office, the total remittances amount to:

a. 262,300
b. 266,800
c. 264,300
d. 267,100

PROB. 3-8 (RPCPA)

The National Home Company ships and bills merchandise to its provincial branch at cost. The branch carries its own accounts receivable and makes its own collections. The branch also pays its expenses. The transactions for the year are reflected in the branch trial balance that follows:

	Debit	Credit
Cash	P 11,900	
National Home Co. Current		P 90,000
Shipments from National Home Co.	120,000	
Accounts receivable	62,500	
Expenses	8,100	
Sales		112,500
Total	P202,500	P202,500
December 31 inventory	P30,000	

a. The net profit of the branch was:

a. 22,500
b. 14,400
c. 21,900
d. Answer not given

b. In the home office books, the Branch Current account should be:
   a. 134,400
   b. 90,000
   c. 104,400
   d. Answer not given

PROB. 3-9 (AICPA)

Mr. Cord owns four corporations. Combined financial statements are being prepared for these corporations, which have inter-entity loans of P200,000 and inter-entity profits of P500,000. What amount of these loans and profits should be included in the combined financial statements?

	Inter-entity Loans	Inter-entity Profits
a.	200,000	0
b.	200,000	500,000
c.	0	0
d.	0	500,000

PROB. 3 - 10 (AICPA)

The following information pertains to shipments of merchandise from Home Office to Branch during 2019:

Home office's cost of merchandise	P 160,000
Intracompany billings	200,000
Sales by branch	250,000
Unsold merchandise at branch, 12/31/2019	20,000

In the combined income statement of Home Office and Branch for the year ended December 31, 2019, what amount of the above transactions should be included in sales?

a. 250,000
b. 230,000
c. 200,000
d. 180,000

PROB. 3–11 (Adapted)

Which represents the proper journal entry for a periodic inventory system that should be made on the books of the branch when goods that cost the home office P100,000 to manufacture are shipped to the branch at a price of P125,000?

a.	Shipments from home office	100,000	
	Home office		100,000
b.	Shipments from home office	125,000	
	Home office		125,000
c.	Shipments from home office	125,000	
	Home office		100,000
	Unrealized profit		25,000
d.	Shipments from home office	100,000	
	Unrealized profit	25,000	
	Home office		125,000

PROB. 3–12 (Adapted)

Which represents the proper journal entry for a periodic inventory system that should be made on the books of the home office when goods that cost the home office P100,000 to manufacture are shipped to a branch at a transfer price of P125,000 and the billed price is not recorded in the shipments to branch account?

a.	Branch office	100,000	
	Shipments to branch		100,000
b.	Branch office	125,000	
	Shipments to branch		125,000
c.	Branch office	125,000	
	Shipments to branch		100,000
	Unrealized profit		25,000
d.	Shipments to branch	100,000	
	Unrealized profit	25,000	
	Shipments from home office		125,000

PROB. 3-13 (RPCPA)

Teicher Co. bills its branch for merchandise shipments at 125% of cost. As of cut off date, 31 December 2019, the following data were available:

	Mdse. From Home Office (at billed price)	Mdse. purchased (fr. outsider)	Total
Merchandise, 1, Dec.	P300,000	P120,000	P420,000
Addition to stock, Dec.	450,000	360,000	810,000
Merchandise, 31 Dec.	420,000	150,000	570,000

The branch returned P15,000 merchandise to the home office acquired at billed price. The amount of the allowance for overvaluation account that was realized as income in view of branch sales for the month of December was

a. 63,000
b. 66,000
c. 87,500
d. 84,000

PROB. 3-14 (Adapted)

Early last year, a Manila-based company established a branch in Iloilo City. It shipped merchandise and billed the branch for P300,000 prior to opening. For the year, it made additional shipments at billed price of P120,000. Within the year, the branch shipped back P7,500 inventory and got credit memo for the said return. On the last working day of the year, an inventory count was made. Ending inventory of P185,000 was established consisting of purchases from outsiders at P20,000, with the balance coming from the home office shipments at billed price of 20% above cost. The total purchases of the branch from outsiders amounted to P72,500. What is the total goods available for sale by the branch at cost?

a. 416,250
b. 422,500
c. 435,250
d. 485,000

PROB. 3 - 15 (RPCPA)

JCPENNY, Philippines has two merchandise outlets, its main store in Manila and its Cebu City branch. For control purposes, all purchases are made by the main store and shipped to the Cebu City branch at cost plus 10%. On January 1, 2019, the inventories of the main store in Manila and the Cebu City branch are P13,600 and P3,960, respectively. During 2019, the main store purchased merchandise costing P40,000 and shipped 40% of its merchandise to the Cebu City branch. At

December 31, 2019, the following journal entry to prepare the books for the next accounting period was prepared:

Sales	32,000	
Inventory	4,840	
Inventory		3,960
Shipments from Main store		17,600
Expenses		10,480
Main store		4,800

a. What was the actual branch income for 2019 on a cost basis, assuming the use of the provisions of the statement of financial accounting standards?
   a. 4.800
   b. 6.320
   c. 6.480
   d. 6.840

b. If the main store has P11.200 worth of inventory unsold at the end of 2019, the inventory of the main store and the branch should appear on the combined balance sheet as at December 31, 2019 is:
   a. 15,160
   b. 15,600
   c. 16,040
   d. 17,200

PROB. 3 - 16 (RPCPA)

The following is the income statement of XYZ Branch in Cebu City for the six-month period ending June 30, 2019:

Sales		P620,000
Cost of Sales:		
Shipments from H.O.	P550,000	
Purchases	50,000	
Total	600,000	
Inventory, June 30		
From H.O. 75,000		
Fr. Outsider 10,000	85,000	515,000
Gross profit		105,000
Expenses		85,000
Net profit		P 20,000

The home office ships merchandise to, and bills, the Branch office at 125% of cost. The rent of the branch office for six months, at a monthly rate of P1,000 was paid by the home office.

a. The home office net profit from its Branch Office in Cebu City, for the six months ending June 30, 2019 is:
   a. 125,000
   b. 124,000
   c. 139,000
   d. 109,000

b. The inventory of the Branch office in Cebu City, at cost, as of June 30, 2019 is:
   a. 85,000
   b. 70,000
   c. 60,000
   d. 75,000

PROB. 3 - 17 (Adapted)

The Manila Corp. has its main office in Cebu City and established a branch in Manila. During 2019, its first year of operations, the home office in Cebu City shipped goods to the branch in Manila at a total billing price of P303,050 which was 10% above cost. At December 31, 2019, the branch reported a net loss from its own operations of P5,500, and an ending inventory of P61,050.

How much is the branch net income (loss) in so far as the home office is concerned?
a. (5,500)
b. 16,500
c. 22,000
d. 27,500

PROB. 3 - 18 (Adapted)

At the end of 2019, the branch reported an inventory of P15,625. The home office bills this branch at 125% of cost. During 2020, goods costing P300,000

were shipped to the branch. The account "allowance for overvaluation of branch inventory" after adjustment, shows a balance of P16,250 at the end of the year.

a. What was the amount of inventory at January 1, 2020 at cost?
   a. 12,500
   b. 15,625
   c. 19,531
   d. 28,125

b. What was the amount of ending inventory at billed price?
   a. 309,375
   b. 247,500
   c. 81,250
   d. 65,000

c. What was the amount of allowance for overvaluation before adjustment?
   a. 61,875
   b. 78,125
   c. 20,312
   d. 20,000

PROB. 3 - 19 (RPCPA)

New Era Corp. bills its newly established branch for merchandise at 140% of cost. At the end of its first month, the branch reported, among other things, the following:

Merchandise from home office (at billed price)	P28,000
Merchandise purchased locally by branch	10,000
Inventory, September 30, of which P2,000 are of local purchases	9,000
Net sales for month	43,500

a. The branch inventory at cost should be recorded at
   a. 38,000
   b. 7,000
   c. 9,000
   d. None of the above

b. The gross profit of the branch in so far as the home office is concerned was
   a. 22,500
   b. 14,500
   c. 22,790
   d. None of the above

PROB. 3 - 20 (RPCPA)

Makati Co. bills its Valenzuela branch for merchandise at 140% of cost. At the end of January 2019, the branch reported the following information:

	Merchandise from Home Office (At billed price)
Inventory, January 1	P 7,560
Shipments received	28,280
Inventory, January 31	8,400

What should be the balance of the allowance account for overvaluation of the branch inventory at January 31?
   a. 2,400
   b. 2,160
   c. 8,080
   d. None of the above

PROB. 3-21 (RPCPA)

Trial balances for the home office and for the branch of Toby Co. show the following accounts before adjustment as of December 31, 2019. The home office bills merchandise to the branch at 20% above cost.

	H. O.	Branch
Unrealized intercompany inventory profit	10,800	
Shipments to branch	24,000	
Purchases from outsiders		7,500
Shipments from Home Office		28,800
Merchandise inventory, December 1, 2019		45,000

What part of the December 1, 2019 branch inventory represents acquisition from outsider purchases, and what part represents acquisition from home office?

	Outsiders	Home Office
a.	P 9,000	P 36,000
b.	10,000	35,000
c.	12,000	33,000
d.	15,000	30,000

PROB. 3-22 (RPCPA)

The Neneng Corp. established its San Pedro branch in March 2019. During the first year of operations, the home office shipped to the branch merchandise which had cost of P120,000. Three-fourths of these merchandise was sold by the branch for P141,000. Operating expenses of the branch amounted to P27,000. How much net income will the branch report if merchandise is billed by the home office to the branch at 25% above cost?

a. 800
b. 1,200
c. 1,500
d. 8,000

PROB. 3-23 (RPCPA)

The Chivas Regal owns the Royal Crown in Quezon City and a branch in Davao City. During 2019, the home office shipped to the branch supplies costing P120,000 at a billed price of 20% above cost. The inventories of supplies at the branch were as follows: January 1 – P90,000; December 31 – P108,000. On December 31, 2019, the home office holds inventories of P160,500, which includes P10,500 held on consignment. Both locations use the periodic inventory method. How much inventories should be reported in the combined balance sheet as of December 31, 2019?

a. 210,000
b. 240,000
c. 270,000
d. 300,000

PROB. 3-24 (RPCPA)

A branch store in Marikina was established by Marco Co. on March 1. Merchandise was billed to this branch at 125% of cost. Shipments of merchandise were as follows:

March 5	P120,000 (at billed price)
March 10	P 50,000 (at billed price)
March 20	P 35,000 (at billed price)

On March 20, the branch returned defective merchandise worth P3,050 and on March 31, it reported a net loss of P6,200, and merchandise inventory of P85,000.

a. In the home office books, the cost of merchandise sold by the branch was
   a. 93,560
   b. 116,950
   c. 161,560
   d. 161,950

b. In the home office books, the branch operations resulted in a net income (loss) of
   a. (6,200)
   b. 17,190
   c. 20,240
   d. 23,390

PROB. 3-25 (RPCPA)

A home office has a branch in Metro Manila. The branch buys merchandise from outside parties and also receives merchandise from the home office for which it is billed at 20% above cost. Below are excerpts from the trial balances and other data of the home office and its branch for the month just ended:

Home Office:	
Cr: Allowance for overvaluation	370,000
Cr: Shipments to branch	850,000
Metro Manila Branch:	
Dr: Beginning inventory	1,440,000
Dr: Shipments from home office	1,020,000

Dr: Purchases	410,000
Month-end branch inventory:	
From home office, at billed price	1,170,000
From outside parties, at cost	290,000

What is the amount of allowance for overvaluation that was realized because of branch sales for the month just ended?

a. 175,000
b. 195,000
c. 200,000
d. 370,000

PROB. 3 – 26 (Adapted)

The Baguio branch of a home office in Manila is billed for merchandise it receives at 125% of cost. The branch turns around and sells them at 25% of billed price. On March 15, all branch's merchandise was destroyed by fire. The branch's records recovered shows the following:

Inventory, January 1 (at billed price)	165,000
Shipments, January 1 to the date of fire (at billed price)	110,000
Purchases (at cost) from outsiders all resold at markup of 20%	7,500
Sales	169,000
Sales returns and allowances	3,750

What is the cost of merchandise destroyed by fire?

a. 120,000
b. 120,240
c. 130,000
d. 140,000

PROB. 3 - 27 (AUTHOR)

An entity set up a branch in a province. The entity and its branch provided the following data on the second year of branch's operation:

	Home Office	Branch
Sales revenue to outside customer	1,000,000	500,000
Beginning inventory	50,000	30,000

Purchases from outside supplier	400,000	100,000
Shipment to branch	200,000	
Shipment from home office		250,000
Ending inventory	80,000	50,000
Operating expenses	150,000	40,000

The following additional data are provided:

- The home office to branch's mark-up based on cost last year is 80% of this year's mark-up on cost.
- 1/5 of the beginning inventory of the branch came from outside supplier.
- 24% of the ending inventory of the branch came from the last year's shipment from the home office while 50% of the ending inventory of the branch came from current year's shipment from the home office.

1. What is the net income reported by the branch in its separate income statement for the current year?
   a. 130,000
   b. 124,000
   c. 95,000
   d. 114,000

2. What is the ending inventory to be reported by the entity in its combined external statement of financial position?
   a. 128,000
   b. 115,000
   c. 130,000
   d. 123,000

3. What is the overstatement in the cost of goods sold reported by the branch in its separate income statement for the current year?
   a. 54,000
   b. 50,000
   c. 52,000
   d. 47,000

4. What is the net income to be reported by the entity in its external combined income statement for the current year?
   a. 810,000
   b. 857,000
   c. 853,000
   d. 864,000

ANSWERS – Theory of Accounts

TOA 3-1 *Suggested answer* (b)

In Home Office and Branch accounting, the branch office account on the home office books represents ***the investment by the home office in the net assets of the branch,*** *not the branch's equity in the home office; thus, choice (b) is a false statement.*

TOA 3-2 *Suggested answer (c)*

The home office and its branch are viewed as single economic entity; thus, ***sales between them are treated as a mere transfer of inventory, not sales.***

TOA 3-3 *Suggested answer (b) Is a periodic inventory system*

When the home office and its branch are using the periodic inventory system, these interoffice shipment accounts, Shipments to Branch and Shipments from Home Office, are used. On the other hand, in a perpetual inventory system, merchandise inventory account will take place these interoffice accounts; and Cost of Goods Sold is recorded by the branch upon sale.

TOA 3-4 *Suggested answer (d) Yes Yes*

Combined financial statements may be used (1.) when one individual owns a controlling interest in several entities with related operations, (2.) to present financial position and results of operations of a group of unconsolidated subsidiaries, (3.) to combine the statements of entities under common management.

TOA 3-5 *Suggested answer (d) Deduction from the investment in Branch account*

In the home office books, the account Branch Current account (Investment in branch) is recorded at billed price for every transfer of merchandise with mark-ups. Any balance of allowance for unrealized profit in branch inventory after adjustment is deducted from the Branch Current account in the Statement of Financial Position of the home office to bring this account at cost.

SOLUTIONS – Problems

PROB. 3-1 *Suggested answer (c) P9,000 loss*

Accounts receivable, end		100,000
Add receipts from sales		350,000
Sales on account		450,000
Accounts payable, end		50,000
Add disbursements for purchases		400,000
Total purchases		450,000
Disbursements for advertising supplies		10,000
Less unused advertising supplies on hand		6,000
Advertising supplies expenses		4,000
Sales		450,000
Less cost of goods sold:		
Purchases	450,000	
Less inventory end	90,000	360,000
Gross profit		90,000
Less expenses:		
Rent	20,000	
Advertising supplies	4,000	
Salaries and commissions	70,000	
Other expenses	5,000	99,000
Net loss		9,000

Under the accrual basis, the amount paid is not necessarily the expense recorded.

PROB. 3 - 2 *Suggested answer* (a) No entry

In adopting the imprest system for the agency working fund, the home office issues a check to the agency for the amount of the fund. Establishment of the fund is recorded in the home office books by a charge to the agency working fund account and a credit to cash. The agency will request fund replenishment whenever the fund runs low and at the end of each fiscal period. Upon sending

the agency check in replenishment of the fund, the home office charges expenses or other accounts for which disbursements from the fund were reported and credits cash. Therefore, under the imprest system, no entry should be recorded by the home office for the P3,000 rent paid by the agency out of its working fund, because expenses of agency paid out of the working fund should be recorded by the home office only when fund is replenished.

PROB. 3 - 3 *Suggested answer*

1. *Suggested answer : (c) 220,000*

Unadjusted balance of Home Office account	250,000
Less Transaction #9 (20,000 + 10,000)	30,000
Adjusted balance of Home Office account	220,000

2. *Suggested answer : (a) 190,000*

Unadjusted balance of Home Office account	190,000
Transaction #1	(20,000)
Transaction #2	10,000
Transaction #3	(30,000)
Transaction #4	(40,000)
Transaction #6	60,000
Transaction #7 (20,000 + 30,000)	50,000
Adjusted balance of Branch account	220,000

PROB. 3-4

a. *Suggested answer (c)*

DR: Shipment from HO	*45,000*	
Freight in	*6,500*	
CR: HO current		*51,500*

As a general rule, the branch acquiring the goods shall record the merchandise received from the home office for an amount equal to the cost of merchandise (in the absence of any mark ups) plus the freight. In case of interbranch transfer of merchandise, a branch is properly charged with the cost of freight on goods it receives. However, a branch should not be charged with excessive freight when, because of indirect routing, excessive costs are incurred. Thus the freight is P6,500 only.

b. *Suggested answer (c) DR: HO current* *55,500*
CR: Shipment from HO 45,000
Freight in 6,000
Cash 4,500

The branch where the goods were erroneously shipped shall eliminate all entries made in its books, as if no interbranch transactions occurred. And should record the freight incurred in shipping the goods to Cagayan de Oro, as if remitted to the home office.

c. *Suggested answer (d) DR: CDO branch current* *51,500*
Shipment to Iloilo 45,000
Excess freight *4,000*
CR: Iloilo branch current *55,500*
Shipment to CDO *45,000*

In case of indirect routing of interbranch transfer of merchandise, a branch should not be charged with excessive freight. Under such circumstances, the branch acquiring the goods should be charged for no more than the normal freight from the usual shipping point. The office directing the interbranch transfer and responsible for the excessive cost should absorb the excess as expense.

PROB. 3 - 5 *Suggested answer* (a) P100 savings

Again, in case of interbranch transfer of merchandise, a special problem arises with respect to the handling of freight charges. A branch is properly charged with the cost of freight on goods it receives. But a branch should not be charged with excessive freight when, because of indirect routing, excessive costs are incurred. Instead the branch acquiring the goods should be charged for no more than the normal freight from the usual shipping point: the office directing the interbranch transfer and responsible for the excessive cost should absorb the excess as a charge to profit and loss. Therefore, the excess of freight if the shipment had been made by the home office directly to Davao branch (P900) over the freight actually paid (P600 + 200) in the amount of P100 should be disposed of as savings.

PROB. 3 – 6

a. *Suggested answer* (a) P16,000

Sales		100,000
Less Cost of Sales:		
Inventory, 1/1/2019	21,000	
Mdse. from home office	61,000	
TGAS	82,000	
Inventory, 12/31/2019	19,000	63,000
Gross profit		37,000
Less expenses		21,000
Net profit, Branch A		16,000

Based on the foregoing information, all merchandise available for sale by the branch were supplied by the home office, and none of which were purchased from outsiders, thus the net profit of Branch A is P16,000.

b. *Suggested answer* (c) P78,000

Inventory, Jan. 1, 2019	21,000
Imprest branch fund	2,000
Accounts Receivable. Jan. 1, 2019	55,000
Home Office account, 1/1/2019	78,000

A constructive approach to solve this question is through the use of accounting equation: Asset = Liabilities + Capital. Since Home Office account is a customary capital account, and in the absence of any liabilities, this reciprocal account is equal to the total assets of the branch at January 1, 2009, thus, the balance of the Home Office account at January 1, 2019 is P78,000.

c. *Suggested answer* (b) P64,000

Inventory, Jan. 1, 2019	19,000
Imprest branch fund	1,500
Accts. Rec. Jan. 1, 2019	43,500
Home Office account, 1/1/2019	64,000

Again, the approach to solve the question being asked is similar with question b, since accounting for Branch A is similar with Branch B.

d. *Suggested answer* (c) P67,000

Inventory, Dec. 31, 2019	12,000
Imprest branch fund	1,500
Accts. Rec. Dec. 31, 2019	53,500
Home Office account, 12/31/2019	67,000

Branch Current account is a debit account maintained in home office books, which represents the investment of home office in its branch. Since, this is a reciprocal account, any balance of which after adjustment, is similar with that of Home Office Current account, a credit account maintained in Branch books. Thus, the applicable principle for this question is identical with that of the aforementioned questions.

e. *Suggested answer* (d) Dr. - P&L/ Cr. – Home Office Current

Sales		80,000
Less Cost of Sales:		
Inventory, 1/1/2019	19,000	
Mdse. from home office	47,000	
TGAS	66,000	
Inventory, 12/31/2019	12,000	54,000
Gross profit		26,000
Less expenses		14,300
Net profit, Branch B		11,700

Again, Home Office Current account is a credit account maintained by the branch in its books. It represents the customary capital account. Since the operations of Branch B resulted to a net profit of P11,700, the balance of this reciprocal account should be increased by such an amount; thus, a debit to Profit & Loss and a credit to Home Office Current.

PROB. 3 - 7 *Suggested answer* (a) P262,300

Accts. receivable, Dec. 31, 2018	85,200
Net sales (272,700 - 4,800)	267,900
Accts. receivable written off	(2,000)
Accts. receivable, Dec. 31, 2019	(88,800)
Total collections, 2019	262,300

The requirement is to determine the amount remitted to the home office. Therefore, the total amount collected during 2019 of P262,300 is the correct answer, because, as stated in the problem, what was remitted to the home office is the total amount collected during the period.

PROB. 3 – 8

a. *Suggested answer* (b) P14,400

Sales		112.500
Cost of sales:		
Shipments from H.O.	120,000	
Inventory, Dec. 31	30,000	90,000
Gross profit		22,500
Expenses		8,100
Net profit		14,400

Generally, the branch accounting system is maintained at the branch. Branch's cash, merchandise, and other assets, as may be needed, are supplied by the home office. The branch may purchase merchandise from outsiders to satisfy certain local needs for goods not available from the affiliated unit. In this case, since no purchases were recorded by the branch, the entire goods available for sale were provided by the home office itself.

b. *Suggested answer* (c) P104,400

Normally, the reciprocal accounts Home Office Current in the Branch books and the Branch Current in the Home Office books show identical balances after adjustments. In the foregoing problem, the information provided is somewhat misleading, because the problem failed to specify, whether the balance of the Branch Current account in question is before or after the reported branch net income. Since the trial balance provided thereat, contains nominal accounts, it is assumed that the home office has not yet taken up the branch net income. When the branch reports net income for the period, the home office debits the branch account and credits Branch income, therefore, the balance of the Branch Current account after closing should be P104,400 (90,000 + 14,400).

PROB. 3-9 *Suggested answer (c) 0 0*

Combined financial statements are appropriately issued when two or more entities have a common relationship, such as common ownership interest or common management. When combined financial statements are issued, inter-entity loans and profits should be eliminated in their entirety.

PROB. 3-10 *Suggested answer* (a) P250,000

In preparing a combined balance sheet, the Home Office Current account and the Branch Current account are eliminated since these are without significance when the related units are recognized as a single entity. Any other interbranch receivable and payable balances that may have been established are also irrelevant and without significance in stating the financial position of the business and are eliminated. In preparing a combined income statement, the accounts Shipments from Home Office and Shipment to Branch are eliminated, since these balances summarize interoffice transfers that are not significant when the related units are reported as a single entity. Other interoffice revenue and expense items are also eliminated so that the combined income statement may report on the results of transactions of the organization with outsiders.

Therefore, the correct amount of sales to be included in the combined income statement is the P250,000 sold by the branch to outsiders.

PROB. 3-11 *Suggested answer* (b)

DR: Shipment from HO	125,000	
CR: Home office		125,000

In a periodic inventory system, when merchandise is received by a branch from home office, the merchandise should be reflected as a debit to shipment from the home office in the amount of the transfer price, with a corresponding credit to home office account to indicate the equity of the home office in the net assets of the branch.

PROB. 3-12 *Suggested answer* (c)

DR: Branch office	125,000	
CR: Shipment to branch		100,000
Unrealized profit		25,000

When goods are shipped from a home office to a branch at a transfer price that reflects original cost plus markup, the branch must record the shipment at the transfer price; while the home office reflects the shipment to branch account at original cost. To maintain a reciprocal relationship between the home office and the branch office accounts, an unrealized profit in branch inventory account (allowance for overvaluation) reflects the markup.

PROB. 3 - 13 *Suggested answer* (a) P63,000

	Billed price		Cost	Allow. for Over-valuation
Inventory, 12/1	300,000	125%	240,000	60,000
Shipments	435,000	125%	348,000	87,000
TGAS	735,000		588,000	147,000
Inventory, 12/31	420,000	125%	336,000	84,000
Cost of Sales	315,000		252,000	63,000

The amount of allowance for overvaluation account that was realized as income in view of branch sales of P63,000 simply represents the overvaluation account from the cost of goods sold by the branch. In the foregoing table, it should be noted that the shipment from home office at billed price P450,000 was reduced by the returned merchandise in the amount of P15,000, thus P435,000; and the billing percentage of 125% of cost was consistently observed considering there was no change on it.

PROB. 3-14 *Suggested answer (a) P416,250*

Net shipment from home office at cost [(300,000 + 120,000 – 7,500) / 120%]	343,750
Add: Purchases from outsiders at cost	72,500
Total goods available for sale at cost	416,250

Generally, total goods available for sale comprised of beginning inventory and net purchases. In home office and branch accounting, any goods return by the branch to its home office is treated as deduction from the total shipments.

PROB. 3 - 15

a. *Suggested answer* (b) P6,320

	Billed Price		Cost	Allow. for Over-valuation
Inventory, 12/1	3,960	110%	3,600	360
Shipments	17,600	110%	16,000	1,600
TGAS	21,560	110%	19,600	1,960
Inventory, 12/31	4,840	110%	4,400	440
Cost of Sales	16,720	110%	15,200	1,520

Sales	32,000
Less cost of sales at cost	15,200
Gross profit	16,800
Expenses	10,480
Actual branch income	6,320

Again, the use of the aforementioned table should be limited to merchandise acquired by the branch from home office and therefore should not include any merchandise acquired by the branch from outsiders. To determine the actual net income of the branch, computations of inventories should be at cost.

b. *Suggested answer* (b) P15,600

Inventory, 12/31/2019 Main Store	11,200
Inventory, 12/31/2019 Branch	4,400
Combined inventory at cost	15,600

When goods are billed to a branch at amounts other than cost, special problem are encountered in the preparation of the combined financial statements. The ending inventory on the branch balance sheet reported at an amount other than cost must be restated in terms of cost in preparing the combined balance sheet. The beginning inventory and the ending inventory balances on the branch income statement reported at amounts other than cost must also be restated in terms of cost in preparing the combined income statement. Thus, the P4,400 ending inventory at cost of the branch developed from the table "a", was used for combined balance sheet presentation purposes.

PROB. 3 – 16

a. *Suggested answer* (d) P109,000

	Billed price		Cost	Allow. for Over-valuation
TGAS	550,000	125%	440,000	110,000
Inventory, 6/30	75,000	125%	60,000	15,000
Cost of Sales	475,000		380,000	95,000

Branch reported net profit	20,000
Less rent paid by home office (1,000 x 6)	6,000
Adjusted reported net profit	14,000
Add realized profit on branch inventory	95,000
Home office profit from branch office	109,000

Since the rent for six months was paid by the home office, it was assumed that said rent expense was not yet taken up by the branch. In addition, the computations of branch net profit in so far as the home office is concerned must be based on the cost of merchandise shipped by the home office to the branch, or the reported net income of the branch plus any realized profit on branch inventory.

b. *Suggested answer* (b) P70,000

Merchandise purchased from outsiders	10,000
Merchandise acquired from home office	60,000
Total branch inventory at cost, 6/30/2019	70,000

The merchandise acquired by the branch from outsiders was already recorded at cost, since it was acquired in a monetary exchange. While the merchandise acquired from home office in the amount of P60,000 was determined through the use of the above tabular computations.

PROB. 3 - 17 *Suggested answer* (b) P16,500

	Billed price		Cost	Allow. for Over-valuation
Shipments/TGAS	303,050	110%	275,500	27,550
Inventory, end	61,050	110%	55,500	5,550
Cost of Sales	242,000	110%	220,000	22,000

Branch reported net loss	(5,500)
Realized profit in inventory sold	22,000
Branch net income in so far as the home office is concerned	16,500

Normally, to determine the actual net income of the branch, which is the branch net income in so far as the home office is concerned, computations of inventories should be at cost. Constructively, the branch net income in so far as the home office is concerned is the reported net income (loss) of the branch plus any profit in inventory sold by the branch and realized by the home office from the mark ups made in billing its branch.

PROB. 3 - 18

a. *Suggested answer* (a) P12,500

	Billed price		Cost	Allow. for Over-Valuation
Inventory, beg.	15,625	125%	12,500	3,125
Shipments	375,000	125%	300,000	75,000
TGAS	390,625	125%	312,500	78,125
Inventory, end	81,250	125%	65,000	16,250
Cost of Sales	309,375	125%	247,500	61,875

Since, the amount of P15,625 is the inventory at the beginning of 2020 reported by the branch, the same represents the inventory at the given date at billed price, because the mark up made by the home office in billing its branch is not known to the branch. Thus, the inventory at January 1, 2020 was P12,500 (P15,625/ 125%).

b. *Suggested answer* (c) P81,250

The amount of P16,250 representing the balance of allowance for overvaluation of branch inventory after adjustment is the unrealized profit of home office from the unsold merchandise of the branch (allowance for overvaluation of branch ending inventory), which is 25% above cost. Therefore, the branch ending inventory at billed price was P81,250 (16,250/ 25% x 125%).

c. *Suggested answer* (b) P78,125

The allowance for overvaluation before adjustment represents the allowance for overvaluation of total goods available for sale. And to determine the profit realized by the home office through markups in the merchandise shipped to the branch, this item (allowance for overvaluation before adjustment) will be adjusted by deducting the allowance for overvaluation of unsold merchandise at the end of the period. (See computations in "a".)

PROB. 3 - 19

a. *Suggested answer* (b) P7,000

From home office [(9,000 – 2,000)/140%]	5,000
From outsiders	2,000
Branch inventory at cost	7,000

The requirement is to determine the branch inventory at cost. Given the 140% billing percentage and P9,000 ending inventory, of which P2,000 are of local purchases, therefore, the remaining P7,000 represent merchandise from home office at billed price. Thus, the cost of merchandise from home office is P5,000, as shown above.

b. *Suggested answer* (d) None of the above (P20,500)

Branch's sales		43,500
Less cost of sales at cost:		
Shipment from home office (28,000/ 140%)	20,000	
Local purchases by branch	10,000	
Total goods available for sale	30,000	
Less inventory end "a"	7,000	23,000
Gross profit		20,500

The gross profit in so far as the home office is concerned is equal to the true gross profit by the branch, and may be computed by considering the cost of sales at cost.

PROB. 3 - 20 *Suggested answer* (a) P2,400

Branch inventory, January 31 at billed price	8,400
Less branch inventory, January 31 at cost (8,400/ 140%)	6,000
Allowance for overvaluation, Inventory January 31	2,400

The allowance for overvaluation represents the excess of billed price over cost of merchandise shipped by the home office to its branch. In the preparation of the balance sheet of the home office, the allowance for overvaluation of branch ending inventory will be shown as a deduction from the Branch Current account.

PROB. 3 – 21 *Suggested answer (a) 9,000 36,000*

	Billed Price		Cost	Allow. for Over-valuation
Inventory beg.	36,000	120%	30,000	6,000
Shipments	28,800	120%	24,000	4,800
TGAS				10,800

Total inventory beginning	45,000
Less Inventory beginning from home office @ billed price	36,000
Inventory beginning from outsiders	9,000

In the point of view of the branch, the inventories sent by the home office are stated at billed price.

PROB. 3-22 *Suggested answer (c) 1,500*

Sales	141,000
Cost of goods sold @ billed price (120,000 x 125% x ¾)	112,500
Gross profit	28,500
Less expenses	27,000
Branch reported net income	1,500

For purposes of computing the branch reported net income, cost of goods sold should be at billed price, because the mark up on merchandise sent by the home office is not known to the branch.

PROB. 3-23 *Suggested answer (b) 240,000*

Branch inventory, Dec. 31, 2019 @ cost (108,000/120%)	90,000
Home office inventory, Dec. 31, 2019 (160,500 – 10,500)	150,000
Combined inventory, December 31, 2019 @ cost	240,000

The amount of inventories to be reported in the combined balance sheet of the home office and its branch should be stated at cost. While, consigned goods should be included in the consignor's inventory and excluded from the consignee's inventory.

PROB. 3-24

a. *Suggested answer (a) 93,560*

	Billed Price		Cost	Allow. for Over-Valuation
Shipments (205,000 – 3,050)	201,950	125%	161,560	40,390
Less inventory end	85,000	125%	68,000	17,000
Cost of goods sold	116,950		93,560	23,390

The amount of merchandise sold b y the branch in the home office books should be at cost, because the home office recorded the shipment to branch at cost.

b. *Suggested answer (b) 17,190*

Branch reported net loss	(6,200)
Realized profit in branch inventory (a)	23,390
Branch net income in the home office books	17,190

The difference between the branch reported net income and the branch net income in so far as the home office is concerned is the realized profit in branch inventory.

PROB. 3-25 *Suggested answer (a) 175,000*

Allowance for overvaluation	370,000
Less overvaluation in branch ending inventory (1,170,000/120% x 20%)	195,000
Realized amount of allowance for overvaluation	175,000

The allowance for overvaluation represents the excess of billed price over cost of merchandise shipped by the home office to its branch. Any amount of allowance for overvaluation that pertains to the inventories sold is considered as realized. Accordingly, any amount of overvaluation that pertains to inventories unsold at the end of a period is unrealized.

PROB. 3 – 26 *Suggested answer (b) 120,240*

Total net sales (169,000 – 3,750)	165,250
Less total sales of merchandise acquired from outsiders (7,500/80%)	9,375
Total net sales of merchandise acquired from home office	155,875
Total goods available for sale from home office at billed price (165,000 + 110,000)	275,000
Less cost of goods sold (at billed price) (155,875 x 80%)	124,700
Inventory end (at billed price)	150,300
Inventory end (at cost) destroyed by fire (150,300/125%)	120,240

Note that the amount of P7,500 is the purchases from outsiders at cost, which were eventually sold at markup of 20%. Since the problem is silent as to markup on cost or on sales, it is safe to assume that this 20% markup is on sales.

PROB. 3 - 27

1. *Suggested answer: (a) 130,000*

Sales revenue of the branch		500,000
Less: Cost of sales of the branch		
(30,000 + 100,000 + 250,000 – 50,000)	330,000	
Operating expenses of the Branch	40,000	370,000
Net income reported by the Branch in its separate statement		130,000

2. *Suggested answer: (d) 123,000*

Ending inventory of the Home Office at cost	80,000
Ending inventory of the branch from outsider at cost (50,000 x 26%)	13,000
Ending inventory of the branch from home office last year at cost [(50,000 x 24%)/1.20]	10,000
Ending inventory of the branch from home office this year at cost [(50,000 x 50%)/1.25]	20,000
Ending inventory of the entity in the combined statement	123,000

3. *Suggested answer: (d) 47,000*

Overstatement in beginning inventory from home office [(30,000 x 4/5) x 20/120]		4,000
Add overstatement of shipment during the year (250,000 – 200,000)		50,000
Unadjusted overvaluation of inventory from home office		54,000
Less: Overstatement in ending inventory from home Office [(50,0000 x 24%) x 20/120]	2,000	
Overstatement in ending inventory from home Office [(50,000 x 50%) x 25/125]	5,000	7,000
Overstatement of cost of sales		47,000

4. *Suggested answer: (b) 857,000*

Total sales revenue (1,000,000 + 500,000)		1,500,000
Less combined cost of sales:		
Beginning inventory at cost [50,000 + (30,000 – 4,000)]	76,000	
Add Purchases from outsiders (400,000 + 100,000)	500,000	
TGAS	576,000	
Less ending inventory at cost [80,000 + (50,000 – 7,000)]	123,000	453,000
Gross profit		1,047,000
Less operating expenses (150,000 + 40,000)		190,000
Combined net income of the company for the current year		857,000

Chapter 4

ACCOUNTING FOR BUSINESS COMBINATION

In November 2004, the Accounting Standard Council (ASC) has approved the adoption of International Financial Reporting Standard (IFRS) #3, Business Combination, issued by the International Accounting Standard Board (IASB), as a Philippine Financial Reporting Standard. IFRS # 3 was originally published in 2004 as the outcome of the IASB's first phase of its business combination project, which set out that all business combinations should be recognized using the purchase method of accounting. The second phase of the project was undertaken with the US standard setter, the Financial Accounting Standard Board (FASB), and addressed the application of the purchase method of accounting. The second edition of IFRS #3 was published in January 2008 replaces the term "purchase method" with "acquisition method". The revised version of IFRS #3 should be applied for business combination that have an acquisition date on or after the beginning of the first annual reporting period beginning on or after July 1, 2009. However, an entity is permitted to adopt the standard in an annual reporting period that begins on or after June 30, 2007.

In June 2008, the Financial Reporting Standards Council (FRSC) has approved the adoption of revised IFRS 3, *Business Combination*, and IAS 27, *Consolidated and Separate Financial Statements*, issued by the International Accounting Standards Board (IASB). The revised standards supersede the existing PFRS 3 and PAS 27, effective July 1, 2009. *(Note: IAS 27, Consolidated and Separate Financial Statements was superseded by IFRS 10 in 2011.)*

Identifying a Business Combination

A business combination as a transaction or other event in which an acquirer obtains control of one or more businesses. Stated differently, a business combination occurs where several entities are brought together to form a single reporting entity. A business, on the other hand, is an integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing a return in the form of dividends, lower costs or other economic benefits directly to investors or other owners, members or participants.

A business combination may be structured in a number of different ways, and therefore the facts of each transaction should be assessed carefully. Application guidance accompanying IFRS #3 provides a list of examples of business combinations, including:

- One or more businesses become subsidiaries of an acquirer;
- One entity transfers its net asset to another entity;
- All entities that are partly to the business combination transfer their net assets to a newly formed entity; or
- A group of former owners of one of the combining entities obtains control of the combined entity.

In a straightforward business combination, one entity will acquire another, resulting in a parent-subsidiary relationship. However, if a business combination involves the purchase of net assets, including goodwill of another entity, rather than the purchase of the equity of the other entity, this does not result in a parent-subsidiary relationship. *(Parent-subsidiary relationship will be discussed in the succeeding chapter.)*

Consideration Transferred in a Business Combination

An acquirer might obtain control of an acquiree in a variety of ways, such as:

1. By transferring cash. cash equivalents or other assets, including net assets that constitute a business;
2. By incurring liabilities;
3. By issuing equity interests;
4. By providing more than one type of consideration; or
5. Without transferring consideration, including by contract alone. (*see: A Business Combination Achieved Without the Transfer of Consideration in the later part of this chapter*)

The consideration transferred in a business combination is the total of the fair value of the consideration given by the acquirer at the acquisition date. Any costs incurred by the acquirer to achieve the business combination, such as legal and professional fees, should not form part of the consideration transferred; instead should be recognized in profit or loss in the period in which they are incurred. The exception to this general requirement is that where cost have been incurred in issuing debt or equity securities should be deducted from the carrying amount of the equity or liability.

Acquisition Method of Accounting

IFRS 3 requires that the *acquisition method* (Purchase method in the 2004 version of IFRS 3) be applied to all business combination. This method shall be applied, whereby:

- It is possible to identify the acquirer;
- The acquisition date is determined;
- The identifiable assets acquired, the liabilities assumed and the non-controlling interest are recognized and measured; and
- The resulting goodwill or gain from a bargain purchase is recognized and measured.

Identifying the Acquirer

The result of nearly all business combination is that one entity, the *acquirer*, obtains control of one or more other businesses, the *acquiree.*

IFRS 3 provides that the acquirer is usually the entity that transfer cash or other assets or by incurring liabilities. However, in a business combination effected by exchanging equity interests, the acquirer is usually the entity that issues its equity interests, except in some cases like in business combinations, commonly called *reverse acquisition*, the issuing entity is the acquiree. *(This will be discussed in the later section of this chapter.)*

In case identification of the acquirer is not clear, the following facts and circumstances may also be considered in identifying the acquirer in a business combination:

- The combining entity whose owners as a group receive the largest portion of the voting rights in the combined entity is likely to be the acquirer;

- Where there is a large minority interest in the combined entity and no other owner has a significant voting interest, the holder of the large minority interest is likely to be the acquirer;

- Where one of the entities has the ability to elect or remove the majority of the members of the governing body of the combined entity, that party is likely to be the acquirer;

- The combining entity whose management dominates the management of the combined entity; or

- Where a premium has been paid over the fair value of one or more of the combining entities prior to the combination, the acquirer is likely to be the entity that has paid the premium.

Determining the Acquisition Date

The acquirer should identify the acquisition date. The acquisition date is the date on which the acquirer obtains control of the acquiree. It is normally the date on which the acquirer legally transfers the consideration for the business. However, it is possible for control to pass to the acquirer before or after this date. Where several dates are keys to the business combination, it is the date on which control passes that determines the date on which the acquisition occurs.

Acquired Assets and Liabilities

IFRS 3 establishes that identifiable assets acquired and liabilities assumed, and the non-controlling interests in the acquiree, are recognized separately from goodwill.

All assets acquired and liabilities assumed in a business combination are measured at acquisition-date fair value. In addition, the acquirer may also recognize some assets and liabilities that the acquiree had not previously recognized in its financial statements. The identifiable net assets acquired should be classified or designated according to their nature at the date of acquisition to ensure that other international standards can be applied subsequent to acquisition; except *Lease Contracts* in accordance with IAS 17, and *Insurance Contracts* in accordance with IFRS 4. These contracts shall be classified on the basis of the contractual terms and other factors at the inception of the contract.

If the initial accounting for a business combination can be determined only provisionally by the end of the first reporting period, the business combination is accounted for using provisional amounts. Adjustments to provisional amounts and the recognition of newly identified assets and liabilities must be made within the *measurement period* where they reflect new information obtained about facts and circumstances that were in existence at the acquisition date. The measurement period cannot exceed one year from the acquisition date and no adjustments are permitted

after one year except to correct an error in accordance with IAS 8, Accounting Policies, changes in Accounting Estimates and Errors.

The acquirer shall also recognize and measure a liability (or asset, if any) related to the acquiree's employee benefit in accordance with IAS 19, Employee Benefit.

The acquirer shall measure an acquired non-current asset (or disposal group) that is classified as held for sale at the acquisition date in accordance with IFRS 5, Non-current Assets Held for Sale and Discontinued Operations.

The acquirer shall recognize as of the acquisition date a contingent liability assumed in a business combination if it is a present obligation that arises from past events and its fair value can be measured reliably, *even if it is not probable*. This is in contrast with IAS 37, Provisions, Contingent Liabilities and Contingent Assets.

The acquirer shall recognize an indemnification asset at the same basis as the indemnified item, subject to the need for valuation allowance for uncollectible amounts.

The acquirer shall measure the value of a reacquired right recognized as an intangible asset on the basis of the remaining contractual term of the related contract, regardless of whether market participants would consider potential contractual renewals when measuring its fair value.

The acquirer shall measure a liability or an equity instrument related to share-based payment transactions of the acquiree in accordance with IFRS 2, Share-based Payment.

Furthermore, the acquirer shall recognize and measure a deferred tax asset or liability arising from the assets acquired and liabilities assumed in a business combination in accordance with IAS 12, Income Taxes. It should be noted that when identifiable net assets and liabilities are revalued at fair value, temporary differences may arise. The recognition of deferred tax asset will increase the fair value of the identifiable net assets; conversely, deferred tax liability will reduce the fair value of those net assets; thereby the computation of goodwill is affected.

Non-Controlling Interests

In addition to the identifiable net assets acquired, the acquirer shall recognize any non-controlling interests in the acquire either:

- At fair value (Full goodwill method), or
- At the non-controlling interest's proportionate share of the acquiree's identifiable net assets (Partial goodwill method)

This choice is available for each business combination, so an entity may use *fair value* approach for one business combination and the *proportionate share of the acquiree's identifiable net assets* for another. For the purpose of measuring non-controlling interests at fair value, it may be possible to determine the acquisition-date fair value on the basis of active market prices for the equity shares not held by the acquirer. In case of non-publicly traded shares, the acquirer should measure the fair value of the non-controlling interests using other valuation techniques.

Recognition and Measurement of Goodwill

The standard requires goodwill resulting from a business combination to be recognized as an asset of the acquiring entity. It is measured as the excess of the consideration transferred plus the amount of any no-controlling interest in the acquiree over the identifiable net assets recognized. As mentioned earlier, the acquirer shall recognize any non-controlling interest in the acquiree either

- At fair value, or
- At the non-controlling interest's proportionate share of the acquiree's identifiable net assets.

The former (the fair value of the non-controlling interests) measures results in the recognition of the non-controlling interest's share of goodwill; while the latter (proportionate share of the acquiree's identifiable net assets) results in goodwill being recognized at the acquisition date as an asset and is initially measured at its cost, being the excess of the cost of the acquisition over the acquirer's interest in the net fair value of the identifiable assets, liabilities, and contingent liabilities.

As stated earlier, this choice is available separately for each acquisition. After the initial recognition, goodwill should not be amortized but tested for impairment periodically. Although recognized as an asset, goodwill should not be revalued.

If the resulting difference is negative, that is an excess of the identifiable net assets acquired in a business combination over the consideration transferred and the non-controlling interests in the acquire, there is a *bargain purchase* or negative goodwill. Since this amount will not normally arise and therefore may have arisen as a result of an error in the measurement of the acquiree's net assets, the standard requires to reassess the recognition of the identifiable net assets acquired. If it still remains after

the reassessment has been completed, it should be recognized as gain in profit or loss in the period in which the business combination took place.

Contingent Consideration

Contingent consideration must be measured at fair value at the time of the business combination and is taken into account in the determination of goodwill. If the amount of contingent consideration changes as a result of a post-acquisition event (such as meeting an earning target), accounting for the change in consideration depends on whether the additional consideration is classified as an equity instrument or an asset or liability.

According to amended requirements under Annual Improvements to IFRS 2010-2012 Cycle, contingent consideration that is classified as an asset or liability is measured at fair value at each reporting date and changes in fair value are recognized in profit or loss both for contingent consideration that is within the scope of IFRS 9 and IAS 39 or otherwise. If the contingent consideration is classified as an equity instrument, the original amount is not remeasured.

Business Combination Achieved in Stages

Prior to control being obtained, an acquirer accounts for its investment in the equity interests of an acquire in accordance with the nature of the investment by applying the relevant standard *(e.g. Investment in Associates and Joint Venture, Joint Arrangements, Financial Instruments: Recognition and Measurement, Financial Instruments).* As part of accounting for business combination, the acquirer remeasures any previously held interest at fair value and takes this amount into account in the determination of goodwill. Any resulting gain or loss is recognized in the profit or loss or other comprehensive income as appropriate.

The accounting treatment of an entity's pre-combination interest in an acquire is consistent with the view that the obtaining of control is a significant economic event that triggers a remeasurement. Consistent with this view, all assets and liabilities of the acquiree are fully remeasured, generally, at fair value. Accordingly, the determination of goodwill occurs only at the acquisition date. (This is different to the accounting for step acquisition under IFRS 3, Business Combination, 2004.)

Business Combination Achieved Without the Transfer of Consideration

In some cases, an acquirer obtains control of an acquiree without transferring consideration. The acquisition method of accounting for a business combination applies to those combinations. Such circumstances include the following:

- The acquiree repurchases a sufficient number of its own shares from other investors giving the acquirer to obtain control.

- Minority veto rights lapse that previously kept the acquirer from controlling an acquiree in which the acquirer held majority voting rights.

- The acquirer and acquire agree to combine their business by contract alone. The acquirer transferred no consideration in exchange for control of an acquiree and holds no equity interest in the acquiree, either on the acquisition date or previously.

  A business combination achieved by contract alone may include bringing together two businesses in a stapling arrangement or forming a dual listed corporation. In this case, the equity interests in the acquiree held by parties other than the acquirer are a non-controlling interest in the acquirer's post-combination financial statements even if the result is that all of the equity interests in the acquiree are attributed to the non-controlling interest.

To determine the amount of goodwill in a business combination in which no consideration is transferred, the acquirer shall use the acquisition-date fair value of the acquirer's interest in the acquiree in place of the acquisition-date fair value of the consideration transferred.

Reverse Acquisition

A reverse acquisition occurs when an entity that issues securities (the legal acquirer) is identified as the acquiree for accounting purposes. The entity whose equity interests are acquired (the legal acquiree) must be the acquirer for accounting purposes for the transaction to be considered as a reverse acquisition.

The accounting acquiree must meet the definition of a business for the transaction to be accounted for as a reverse acquisition, and all of the recognition and measurement principles in this IFRS apply, including the requirement to recognize goodwill.

Generally speaking, the entity that issues the equity shares in exchange for the net assets of the other entity normally can be designated as acquirer. However, in a business combination referred to as reverse acquisition, the acquirer could be the entity whose equity interests are acquired and the issuing entity is the acquiree. This can be the case where a private entity decides to have itself "acquired" by a smaller public entity in order to obtain a stock exchange listing. The entity issuing the shares will be regarded as the parent, and the private entity is regarded as the subsidiary. The legal subsidiary will be deemed to be the acquirer if it has the power to govern the financial and operating policies of the legal parent.

Accordingly, the acquisition-date fair value of the consideration transferred by the accounting acquirer for its interest in the accounting acquiree is based on the number of equity interests the legal subsidiary would have had to issue to give the owners of the legal parent the same percentage equity interest in the combined entity that results from the reverse acquisition. The fair value of the number of equity interests calculated in that way can be used as the fair value of consideration transferred in exchange for the acquireee.

ACCOUNTING FOR SMALL AND MEDIUM-SIZED ENTITIES (SMEs)

According to IFRS/PFRS for SMEs, business combinations are defined as the bringing together of separate entities or businesses into one reporting entity. A business is an integrated set of activities and assets conducted and managed for the purpose of providing a return to investor or other economic benefits to participants. It applies to accounting for business combinations and goodwill both at the time of the business combination and subsequently. It does not apply to 1.) combinations of businesses under common control; 2.) the formations of a joint venture; or 3.) acquisition of assets that do not constitute a business.

Business combination per IFRS?PFRS for SMEs are accounted for using the purchase method the one described in IFRS 3, Business Combination, 2004 and not IFRS 3 in 2008, which involves the following steps:

- Identifying the acquirer;
- Measuring the cost of the business combination as the aggregate of the fair value of assets given, liabilities assumed and equity issued **including transaction costs;**
- Recognizing the assets acquired and liabilities assumed at fair value; and
- Recognizing any difference between the cost of the business combination and the acquirer's interest in the fair value of the assets and liabilities

assumed, as goodwill. If the difference is negative (negative goodwill or gain from a bargain purchase), the resulting gain is recognized in profit or loss.

When a business combination agreement provides for an adjustment to the cost of the combination contingent on future events, the acquirer shall include the estimated amount of that adjustment in the cost of the combination at the acquisition date if it is **probable and can be measured reliably.** However, if the potential adjustment is not recognized at the acquisition date but subsequently become probable and can be measured reliably, the additional consideration shall be treated as an adjustment to the cost of the combination.

Provisions for acquired contingent liabilities are recognized as part of the business combination if their **fair value can be measured reliably.**

Goodwill is measured at **cost less accumulated amortization and impairment losses.** Reversal of goodwill impairment is not permitted. If a reliable estimate of the useful life of goodwill cannot be made, it is **presumed to be 10 years.**

Any non-controlling interest in the acquiree is measured at the non-controlling interest's proportionate share of the recognized amounts of the acquiree's identifiable net assets.

MULTIPLE CHOICE – Theory of Accounts

TOA 4-1 (AICPA)

A business combination may be legally structured as a merger, a consolidation, an investment in stock, or a direct acquisition of assets. Which of the following describes a business combination that is legally structured as a merger?

a. The surviving company is one of the two combining companies.
b. The surviving company is neither of the two combining companies.
c. An investor-investee relationship is established.
d. A parent-subsidiary relationship is established.

TOA 4-2 (AASB)

Which of the following statements is true regarding a statutory merger?

a. The original companies dissolve while the remaining as separate divisions of a newly created company.
b. Both companies remain in existence as legal corporations with one corporation now a subsidiary of the acquiring company.
c. The acquired company dissolve as a separate corporation and becomes a division of the acquiring company.
d. The acquiring company acquires the stock of the acquired company as an investment.

TOA 4-3 (AICPA)

A horizontal merger is a merger between

a. Two or more firms from different and unrelated markets.
b. Two or more firms at different stages of the production process.
c. A producer and its supplier.
d. Two or more firms in the same market.

TOA 4-4 (AASB)

Which of the following statements is NOT in accordance with IFRS 3, *Business Combination?*

a. An entity shall account for each business combination by applying the

acquisition method.

b. For each business combination, one of the combining entities shall be identified as the acquirer.
c. The acquirer is required to recognize, separate from goodwill, the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquiree.
d. The acquirer shall measure the identifiable assets acquired and the liabilities assumed at their acquisition-date agreed values.

TOA 4-5 (AICPA)

IFRS 3 requires all identifiable intangible assets of the acquired business to be recorded at their fair values. Many intangible assets that may have been subsumed within goodwill must be now separately valued and identified. Under IFRS 3, when would an intangible asset be "identifiable"?

a. When it meets the definition of an asset in the *Framework* document only.
b. When it meets the definition of an intangible asset in IAS 38, *Intangible Assets*, and its fair value can be measured reliably.
c. If it has been recognized under local generally accepted accounting principles even though it does not meet the definition in IAS 38.
d. Where it has been acquired in a business combination.

TOA 4-6 (AICPA)

Pilipinas Co. acquired all of the assets and liabilities of Saba Co. for cash in a legal merger. Which one of the following would not be recognized by Pilipinas on its books in recording the business combination?

a. Accounts receivable
b. Investment in Saba Co.
c. Intangible asset – Patent
d. Accounts payable

TOA 4-7 (IFRS)

Should the following costs be included in the consideration transferred in a business combination, according to IFRS 3, Business Combination?

1- Costs of maintaining an acquisitions department.
2- Fees paid to accountants to effect the combination.

	Cost (1)	Cost (2)
a.	No	No
b.	No	Yes
c.	Yes	No
d.	Yes	Yes

TOA 4-8 (Adapted)

In a purchase business combination, the direct acquisition, indirect acquisition, and security issuance costs are accounted for as follows:

	Direct Acquisition	Indirect Acquisition	Security Issuance
a.	Added to price paid	Added to price paid	Added to price paid
b.	Added to price paid	Expensed	Deducted from value of security issued
c.	Expensed	Expensed	Deducted from value of security issued
d.	Expensed	Expensed	Expensed

TOA 4-9 (Adapted)

A business combination is accounted for as a purchase. Which of the following expenses related to the business combination should be included, in total, in the determination of net income of the combined corporation for the period in which the expenses are incurred?

	Fees of finders and consultants	Registration fees for equity securities issued
a.	Yes	Yes
b.	Yes	No
c.	No	Yes
d.	No	No

TOA 4-10 (AASB)

Which of the following statements is NOT a key feature of the acquisition method?

a. Goodwill is measured as the consideration transferred plus the amount of any non-controlling interest, plus the fair value of any previously held equity interest in the acquiree, less the fair value of the identifiable net assets acquired.
b. The measurement of acquired identifiable assets at fair value.
c. Cost of the business combination is measured at the fair value of the net assets received from the acquiree.
d. An acquirer being identified for each business combination.

TOA 4-11 (Adapted)

Which of the following statements is true regarding the acquisition method for a business combination?

a. Net assets of the acquired company are reported at their fair values.
b. Net assets of the acquired company are reported at their book values.
c. Indirect costs of the combination reduce additional paid in capital.
d. The acquisition can only be effected by a mutual exchange of voting common stock.

TOA 4-12 (AICPA)

Company P acquired the assets (net of liabilities) of Company S in exchange for cash. The acquisition price exceeds the fair value of the net assets acquired. How should Company P determine the amounts to be reported for the plant and equipment, and for long-term debt of the acquired Company S?

	Plant and Equipment	Long-term Debt
a.	Fair value	S's carrying amount
b.	Fair value	Fair value
c.	S's carrying amount	Fair value
d.	S's carrying amount	S's carrying amount

TOA 4-13 (AASB)

At the acquisition date, which of the following is NOT required to be recognized by the acquirer?

a. Liabilities assumed.
b. Non-controlling interest in the acquiree.
c. Goodwill separately from the identifiable assets acquired.
d. Retained earnings of the acquiree.

TOA 4-14 (AICPA)

With respect to the allocation of the cost of a business acquisition, PFRS 3 requires

a. Cost to be allocated to the assets based on their carrying values.
b. Cost to be allocated based on fair values.
c. Cost to be allocated based on original costs.
d. None of the above.

TOA 4-15 (IFRS)

In a business combination, an acquirer's interest in the fair value of the net assets acquired exceeds the consideration transferred in the combination. Under IFRS 3, Business Combination, the acquirer should

a. Recognize the excess immediately in profit or loss.
b. Recognize the excess immediately in other comprehensive income.
c. Reassess the recognition and measurement of the net assets acquired and the consideration transferred, then recognize any excess immediately in profit or loss.
d. Reassess the recognition and measurement of the net assets acquired and the consideration transferred, then recognize any excess immediately in other comprehensive income.

TOA 4-16 (AICPA)

In accounting for business combination, which of the following intangibles should not be recognized as an asset apart from goodwill?

a. Trademarks
b. Lease agreements
c. Employee quality
d. Patents

TOA 4-17 (AASB)

In relation to goodwill arising from a business combination, which one of the following statements is in accordance with IFRS 3, Business Combination?

a. Goodwill should be amortized on a straight-line basis over a period of up to 20 years.
b. Goodwill should be measured at cost less accumulated impairment losses.
c. Goodwill is only tested for impairment if circumstances indicate it may be impaired.
d. Goodwill should be measured at cost less accumulated amortization.

TOA 4-18 (AICPA)

An intangible asset with an indefinite life is accounted for as follows:

a. No amortization but annual impairment test.
b. Amortized and impairment tests annually.
c. Amortized and impairment tested if there is a "trigger event."
d. Amortized and no impairment test.

TOA 4-19 (AASB)

As defined in IFRS 3, Business Combination, goodwill is

a. An intangible asset.
b. Future economic benefits arising from assets that are not capable of being separately recognized or individually identified.
c. Determined as being the excess of the fair value of the identifiable net assets acquired over the cost of an acquisition.
d. Recognized by the acquirer, at acquisition date, as an asset in its own books.

TOA 4-20 (AICPA)

Which of the following costs should be capitalized and amortized over their estimated useful lives?

	Costs of goodwill from purchase business combination	Costs of developing goodwill internally
a.	No	No
b.	Yes	No
c.	No	Yes
d.	Yes	Yes

TOA 4-21 (AICPA)

In a business combination, Dire Co. purchased Wall Co. at a cost that resulted in recognition of goodwill having an expected 10-year benefit period. However, Dire plans to make additional expenditures to maintain goodwill for a total of 40 years. What costs should be capitalized and over how many years should they be amortized?

	Costs capitalized	Amortization period
a.	Acquisition costs only	0 years
b.	Acquisition costs only	40 years
c.	Acquisition costs and maintenance costs	10 years
d.	Acquisition costs and maintenance costs	40 years

TOA 4-22 (AICPA)

How is goodwill measured under IFRS 3, *Business Combination*?

a. Partial goodwill.
b. Full goodwill.
c. Parent company method.
d. Choice of partial or full goodwill on individual transaction basis.

TOA 4-23 (AICPA)

What is meant by "full goodwill" method?

a. The recognition of the goodwill, which relates to the parent companies interest.
b The recognition of the goodwill, which relates to the non-controlling

interest and the controlling interest.

c. The recognition of the goodwill, which relates to the non-controlling interest.
d. A bargain purchase.

TOA 4-24 (AICPA)

If the impairment of the value of goodwill is seen to have reversed, then the company may

a. Reverse the impairment charge and credit income for the period.
b. Reverse the impairment charge and credit retained earnings.
c. Not reverse the impairment charge.
d. Reverse the impairment charge only if the original circumstances that led to the impairment no longer exist and credit retained earnings.

TOA 4-25 (Adapted)

An entire acquired entity is sold. The goodwill remaining from the acquisition should be

a. Included in the carrying amount of the net assets sold.
b. Charged to retained earnings of the current period.
c. Expensed in the period sold.
d. Charged to retained earnings of prior periods.

TOA 4-26 (IFRS)

The National Co. acquired 80% of the Local Co. for a consideration transferred of P100,000,000. The consideration was estimated to include a control premium of P24,000,000. Local's net assets were P85,000,000 at the acquisition date. Are the following statements TRUE or FALSE, according to IFRS 3, Business Combination?

1- Goodwill should be measured at P32,000,000 if the non-controlling interest is measured at its share of Local's net assets.
2- Goodwill should be measured at P34,000,000 if the non-controlling interest is measured at fair value.

	Statement (1)	Statement (2)
a.	False	False
b.	False	True
c.	True	False
d.	True	True

TOA 4-27 (Adapted)

According to IFRS/PFRS for SMEs, the purchase method of accounting for a business combination involves the following, EXCEPT

a. Identifying an acquirer.
b. Measuring the cost of business combination.
c. Allocating, at acquisition date, the cost of business combination to the assets acquired and liabilities and contingent liabilities assumed.
d. Combination of entities or businesses under common control.

TOA 4-28 (Adapted)

An SME shall include a contingent consideration in the cost of business combination

a. Regardless of the probability of payment.
b. When the adjustment is probable.
c. When the adjustment can be measured reliably.
d. When the adjustment is probable and can be measured reliably.

TOA 4-29 (Adapted)

At acquisition date of business combination, an SME shall

a. Not recognize goodwill acquired in a business combination.
b. Recognize goodwill acquired in a business combination as an asset, amortize and test it annually for impairment.
c. Recognize goodwill acquired in business combination as an asset and not amortize it.
d. Recognize goodwill acquired in business combination and not amortize it but test it annually for impairment.

TOA 4-30 (Adapted)

According to IFRS/PFRS for SMEs, what is the amortization period of goodwill acquired in a business combination?

a. Ten years
b. Forty years
c. Useful life based on management's best estimate but not to exceed ten years if the useful life cannot be established reliably.
d. Indefinite

MULTIPLE CHOICE – Problems

PROB. 4-1 (Adapted)

On August 31, 2020, Wood Corp. issued 100,000 shares of its P20 par value common stock for the net assets of Pine, Inc., in a business combination accounted for by the acquisition method. The market value of Wood's common stock on August 31 was P36 per share. Wood paid a fee of P160,000 to the consultant who arranged this acquisition. Cost of registering and issuing the equity securities amounted to P80,000. No goodwill was involved in the purchase. What amount should Wood capitalize as the cost of acquiring Pine's net assets?

a. 3,600,000
b. 3,680,000
c. 3,760,000
d. 3,840,000

PROB. 4-2 (IFRS)

The Gem Corp. acquired 100% of the Koala Co. for a consideration transferred of P112,000,000. At the acquisition date, the carrying amount of Koala's net assets was P100,000,000 and their fair value was P120,000,000. How should the difference between the consideration transferred and the net assets acquired be presented in Gem's financial statements, according to IFRS 3, Business Combination?

a. Gain on bargain purchase of P8,000,000 recognized in other comprehensive income.
b. Gain on bargain purchase of P8,000,000 deducted from other intangible assets.
c. Gain on bargain purchase of P8,000,000 recognized in profit or loss.
d. Goodwill of P12,000,000 as an intangible asset.

PROB. 4-3 (IFRS)

100% of the equity share capital of the Roman Co. was acquired by the Sweet Co. on July 30, 2016. Sweet Co. issued 500,000 new P1 ordinary shares which had a fair value of P8 each at the acquisition date. In addition, the acquisition

resulted in Sweet incurring fees payable to external advisers of P200,000 and share issue costs of P180,000. In accordance with IFRS 3, Business Combination, goodwill at the acquisition date is measured by subtracting the identifiable assets acquired and the liabilities assumed from

a. 4,000,000
b. 4,180,000
c. 4,200,000
d. 4,380,000

PROB. 4-4 (AICPA)

On April 7, 2020, Dart Co. paid P620,000 for all the issued and outstanding common stock of Wall Corp. in a transaction properly accounted as a purchase. The recorded assets and liabilities of Wall Corp. on April 1, 2020 are:

Cash	60,000
Inventory	180,000
Property and equipment (net of accumulated depreciation of P220,000)	320,000
Goodwill	100,000
Liabilities	(120,000)
Net assets	540,000

On April 1, 2020, Wall's inventory had a fair value of P150,000 and the property and equipment (net) had a fair value of P380,000. What is the amount of goodwill resulting from the business combination?

a. 150,000
b. 120,000
c. 50,000
d. 20,000

PROB. 4-5 (IFRS)

The Lamp Co. acquired a 70% interest in the Ohau Co. for P1,960,000 when the fair value of Ohau's identifiable assets and liabilities was P700,000 and elected to measure the non-controlling interest at its share of the identifiable net assets. Annual impairment reviews of goodwill have not resulted in any impairment losses being recognized. Ohau's current statement of financial position shows share capital of P100,000, a revaluation reserve of P300,000 and retained

earnings of P1,400,000. Under IFRS 3, Business Combination, what figure in respect of goodwill should now be carried in Lamp's consolidated statement of financial position?

a. 1,470,000
b. 160,000
c. 1,260,000
d. 700,000

PROB. 4-6 (AICPA)

The Chief Executive Officer (CEO) of Buy-It Company is contemplating selling the business to new interests. The cumulative earnings for the past 5 years amounted to P800,000. The annual earnings, based on an average rate of return on investment for this industry, would have been P145,000. If excess earnings are to be capitalized at 8%, what would be the implied goodwill in this transaction?

a. 937,500
b. 800,000
c. 187,500
d. 52,400

PROB. 4-7 (Adapted)

In a business combination accounted as purchase, Major Corp. issued non-voting, non-convertible preferred stock with a fair value of P8,000,000 in exchange for all of the outstanding common stock of Minor Co. On the acquisition date, Minor had tangible net assets with a carrying amount of P4,000,000 and a fair value of P5,000,000. In addition, Major issued preferred stock valued at P800,000 to an individual as a finder's fee in arranging the transaction. As a result of this transaction, Major should record an increase in net assets of

a. 4,000,000
b. 5,000,000
c. 5,800,000
d. 8,000,000

PROB. 4-8 (Adapted)

On January 1, 2020, Dragons Corp. acquired the net assets of Blue Marlins Corp. in a business combination. At that date, the property, plant and equipment of Blue Marlins had a book value of P21,000,000 and a fair value of P22,500,000. These assets were originally acquired at a cost of P30,000,000, but would presently cost P12,000,000. Using the acquisition method, what amount should the combined entity report its property, plant, and equipment account?

a. 36,000,000
b. 30,000,000
c. 22,500,000
d. 21,000,000

PROB. 4-9 (IFRS)

The Moon Co. acquired a 70% interest in the Swain Co. for P1,420,000 when the fair value of Swain's identifiable assets and liabilities was P1,200,000. Also, Moon acquired a 65% interest in the Hadji Co. for P300,000 when the fair value of Hadji's identifiable assets and liabilities was P640,000. Moon measures non-controlling interests at the relevant share of the identifiable net assets at the acquisition date.

Neither Swain nor Hadji had any contingent liabilities at the acquisition date and the above fair values were the same as carrying amounts in their financial statements. Annual impairment reviews have not resulted in any impairment losses being recognized. Under IFRS 3, Business Combination, what figures in respect of goodwill and of gains on bargain purchase should be included in Moon's consolidated statement of financial position?

a. Goodwill: P580,000
   Gain on bargain purchase: P116,000
b. Goodwill: None
   Gain on bargain purchase: P116,000
c. Goodwill: None
   Gain or bargain purchase: None
d. Goodwill: P580,000
   Gain on bargain purchase: None

PROB. 4-10 (AASB)

On July 1, 2020, Brigg Co. agreed to purchase the assets and liabilities of Scott Co. for P4,000,000 cash, plus 10,000,000 shares in Brigg Co. At this date, the fair value of each share in Brigg was at P1.20. Cost directly attributable to the business combination totaled P50,000. The statement of financial position of Scott as at the date of purchase is presented below:

Assets:	
Trade receivables	2,500,000
Inventory	5,200,000
Land and building (net)	8,000,000
Total	15,700,000
Liabilities:	
Bank overdraft	500,000
Creditors	3,000,000
Equity:	
Capital and retained earnings	12,200,000
Total	15,700,000

In the negotiation process, Brigg has determined the following fair values for Scott's assets and liabilities (assume that no deferred tax assets or liabilities arose from the business combination).

Trade receivables	2,400,000
Inventory	5,000,000
Land and building (net)	10,000,000
Bank overdraft	(500,000)
Creditors	(3,000,000)
Total	13,900,000

At what amount would the goodwill purchased by Brigg Co. be measured?

a. 2,100,000
b. 2,150,000
c. 3,800,000
d. 3,850,000

PROB. 4-11 (RPCPA)

On July 1, 2020, the balance sheet of Com Co. and Pol Co. are as follows:

	Com Co.	Pol Co.
Assets	P4,000,000	P2,500,000
Liabilities	1,500,000	800,000
Capital stock, no par	2,000,000	
Capital stock, P100 par		1,000,000
Additional paid in capital	700,000	300,000
Retained earnings	(200,000)	400,000

Com Co. on this date, agreed to acquire all the assets, and assume all the liabilities of Pol Co. in exchange for shares of stock that it will issue. The stock of Com Co. is selling in the market at P50 per share. The assets of Pol Co. are to be appraised, and Com Co. is to issue shares of its stock with a market value equal to that of the net assets transferred by Pol Co. The value of the assets of Pol Co., per appraisal, increased by P300,000.

a. On the assumption that the acquisition method is applied, the total liabilities and stockholders' equity of Com Co. reflecting the combination is:
   a. 6,800,000
   b. 6,500,000
   c. 6,200,000
   d. 6,000,000

b. The capital stock reflecting the combination under acquisition method is:
   a. 3,000,000
   b. 3,300,000
   c. 3,500,000
   d. 4,000,000

PROB. 4-12 (IFRS)

On July 1, 2020, the Magna Co. acquired 100% of the Natural Co. for a consideration transferred of P160,000,000. At the acquisition date, the carrying amount of Natural's net assets was P100,000,000.

At the acquisition date, a provisional fair value of P120,000,000 was attributed to the net assets. An additional valuation received on May 31, 2021 increased this provisional fair value to P135,000,000 and on July 30, 2021, this fair value was finalized at P140,000,000. What amount should Magna present for goodwill in its statement of financial position at December 31, 2021, according to IFRS 3, Business Combination?

a. 25,000,000
b. 40,000,000
c. 20,000,000
d. 60,000,000

PROB. 4-13 (IFRS)

On July 1, 2020, Centre Co. acquired Asia Corp. that resulted to goodwill in the amount of P4,800,000. By December 31, 2020, the end of its 2020 reporting period, Centre Co. had provisional fair values for the following items:

- Trademarks effective in certain foreign territories of P400,000. These had an average remaining useful life of 10 years at the acquisition date. The acquisition date fair value was finalized at P500,000 on March 31, 2021.

- Trading rights in other foreign territories of P600,000. These had an average remaining useful life of 5 years at the acquisition date. The acquisition date fair value was finalized at P300,000 on September 30, 2021.

By what amount the 2020 net income, be increased or decreased by the provisional fair values of trademarks and trading rights?

a. No effect to 2020 net income, since the finalization occurred in 2021.
b. Decreased by P5,000.
c. Increased by P25,000.
d. Increased by P30,000

PROB. 4-14 (Author)

On January 1, 2020, Entity A acquires 30,000 out of 100,000 outstanding ordinary shares of Entity B for P90,000. For the six months ended June 30, 2020, Entity B reported net income of P40,000.

On July 1, 2020, Entity A acquires additional 60,000 ordinary shares of Entity B at a price of P240,000. Entity A paid P20,000 acquisition related costs and P10,000 indirect costs of business combination. The acquisition price of per share of the additional shares clearly reflects the fair value of the existing interest of Entity A on Entity B. It is the policy of Entity A to initially measure the noncontrolling interest in net assets of the acquiree at fair value. The fair value of the noncontrolling interest in net assets of the acquire is appraised at P50,000.

At the acquisition date, the net assets of Entity B are reported at P400,000. An asset of Entity B is overvalued by P50,000 while one of its liability is overvalued by P30,000.

1. What is the gain on remeasurement of existing Investment in Entity B as a result of step acquisition?
   a. 18,000
   b. 30,000
   c. 24,000
   d. 12,000

2. What is the goodwill or (gain on bargain purchase) as a result of business combination?
   a. 18,000
   b. (20,000)
   c. 24,000
   d. 30,000

PROB. 4-15 (AICPA)

On January 1, 2020, America Co. acquired 60% interest in Bulgaria Co. for P80,000,000. America already held a 10% interest which had been acquired for P12,000,000 but which was fair valued at P15,000,000 at January 1, 2020. The fair value of the non-controlling interest at January 1, 2020 was P47,000,000 and the fair value of the identifiable net assets of Bulgaria was P130,000,000. At how much should a gain relating to the revaluation of the original equity interest be recorded?

a. 3,000,000
b. 12,000,000
c. 35,000,000
d. 38,000,000

PROB. 4-16 (AASB)

On July 1, 2020, Igloo Co. acquired all of the ordinary shares in Super Co. At that date, the shareholders' equity of Super was as follows:

Issued capital (10,000,000 shares)	10,000,000
Retained profits	8,000,000
Total	18,000,000

Igloo Co. used its control to have Super Co. revalue its assets to fair value in its financial statements, resulting in a revaluation increment of P2,000,000. This revaluation led to the recognition of a deferred tax liability of P600,000. The amount of goodwill included in the consolidated statement of financial position was P1,000,000. Acquisition-related costs totaled P200,000. What was the consideration paid by Igloo for the shares in Super Co.?

a. 20,200,000
b. 20,400,000
c. 21,000,000
d. 21,200,000

ANSWERS – Theory of Accounts

TOA 4-1 *Suggested answer (a) The surviving company is one of the two combining companies*

In a business combination legally structured as merger, one enterprise acquires all of the net assets of one or more other enterprises through an exchange of stock, payment of cash or other property, or the issue of debt instruments.

TOA 4-2 *Suggested answer (c) The acquired company dissolve as a separate corporation and becomes a division of the acquiring company.*

A statutory merger is a business combination in which one of the combining entities continues in existence as a legal entity; while all others cease to exist. It is essentially the same as an acquisition, though an acquisition carries a slight connotation of a hostile takeover, while statutory merger does not.

TOA 4-3 *Suggested answer (d) Two or more firms in the same market.*

Horizontal merger involves those where competitors serving similar functions hope to economize by combining similar functions. In other words, it is the fusion of firms performing similar functions resulting with the surviving company's bigger share of the market. Example of which includes a bank absorbs another bank.

TOA 4-4 *Suggested answer (d) The acquirer shall measure the identifiable assets acquired and the liabilities assumed at their acquisition-date agreed values.*

IFRS 3, Business Combination provides that the acquirer shall measure the identifiable assets acquired and the liabilities assumed at their acquisition-date fair values, NOT acquisition-date agree values.

TOA 4-5 *Suggested answer (a) When it meets the definition of an asset in the Framework document only.*

IFRS 3, Business Combination, provides that the acquirer must recognize separately at the date of acquisition the acquiree's identifiable assets, liabilities, and contingent liabilities that satisfy the recognition criteria at that date set out in the IFRS. To qualify for recognition as part of applying the acquisition method, an item should meet the definition of an asset or liability in the Framework for the Preparation and Presentation of Financial Statements at the acquisition date (IFRS 3.11).

TOA 4-6 *Suggested answer (b) Investment in Saba Co.*

In a legal merger, where net assets are acquired, the acquirer shall record the assets and liabilities acquired but not an Investment account. There can be no investment to be recorded, because the acquired company, in this case, will cease to exist.

TOA 4-7 *Suggested answer (a) No No*

According to PFRS 3, Business Combination, acquisition related costs should not form part of the consideration transferred, instead should be recognized in the profit or loss in the period in which they are incurred; except the costs of issuing equity instruments, which are an integral part of the equity issue transaction, should reduce the proceeds from the equity issue. Likewise, costs of issuing debt securities, which are included in the measurement of financial liabilities.

TOA 4-8 *Suggested answer (c) Expensed*
Expensed
Deducted from value of security issued

Again, in accordance with PFRS 3, Business Combination, acquisition related costs should not form part of the consideration transferred, instead should be recognized in the profit or loss in the period in which they are incurred; except the costs of issuing equity instruments, which are an integral part of the equity issue transaction, should reduce the proceeds from the equity issue; and costs of issuing debt securities, which are included in the measurement of financial liabilities.

TOA 4-9 *Suggested answer (b) Yes No*

Again, as explained earlier, all acquisition-related costs should not form part of the consideration transferred. Therefore, fees of finders and consultants are included in the profit or loss; while registration fees for equity securities issued should not be included in the determination of income.

TOA 4-10 *Suggested answer (c) Cost of the business combination is measured at the fair value of the net assets received from acquire.*

The cost of the business combination is measured primarily by reference to the consideration transferred which reflects what was given, NOT what was received.

TOA 4-11 *Suggested answer (a) Net assets of the acquired company are reported at their fair values.*

Again, IFRS 3, Business Combination provides that the acquirer shall measure the identifiable assets acquired and the liabilities assumed at their acquisition-date fair values.

TOA 4-12 *Suggested answer (b) Fair Value Fair Value*

PFRS 3, Business Combination, provides that the identifiable assets, liabilities and contingent liabilities, where the fair value can be measured reliably shall be recorded initially at its fair value, irrespective of the extent of any minority interest.

TOA 4-13 *Suggested answer (d) Retained earnings of the acquiree*

According to IFRS 3, Business Combination, at acquisition date, the acquirer shall recognize, separately from goodwill, the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquiree.

TOA 4-14 *Suggested answer (b) Cost to be allocated based on fair values.*

PFRS 3, Business Combination, requires the use of acquisition method for all business combinations. Under this method, the acquisition cost is allocated to acquired assets and liabilities based on their fair values. Any excess of cost over the fair value of net assets is allocated to goodwill.

TOA 4-15 *Suggested answer (c) Reassess the recognition and measurement of the net assets acquired and the consideration transferred, then*

recognize any excess immediately in profit or loss.

The term bargain purchase or negative goodwill is used to describe the excess of the identifiable net assets recognized in a business combination over the consideration transferred and the non-controlling interest in the acquiree. It is generally unusual for a discount to arise, since it means that the acquirer paid less than net asset value for the business. PFRS 3, Business Combination, assumes that such an amount will not normally arise and therefore may have arisen as a result of an error in the measurement of the acquiree's net assets, the non-controlling interest or the consideration transferred. It requires the acquirer to reassess the recognition or the identifiable net assets acquired. If a discount still remains after the reassessment has been completed, then it should be recognized in profit or loss in the period in which the business combination took place. This treatment is required since any discount reflects the reality that a bargain purchase was made.

TOA 4-16 *Suggested answer (c) Employees quality*

PFRS 3, Business Combination, provides that the acquirer shall recognize intangibles as assets separate from goodwill if they are separable and arise from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations. Trademarks, lease agreements, and patents arise from contractual or legal rights, while employee quality does not arise from contractual or legal rights and is not separable.

TOA 4-17 *Suggested answer (b) Goodwill should be measured at cost less accumulated impairment losses.*

Subsequent to the date of purchase, IFRS 3 requires goodwill to be measured after initial recognition at the amount recognized at acquisition date less any accumulated impairment losses. It is no longer amortized but tested for impairment annually.

TOA 4-18 *Suggested answer (a) No amortization but annual impairment test*

If the intangible asset has a finite useful life, it must be systematically amortized over its useful life. On the other hand, if the intangible asset has an indefinite

useful life, the asset must not be amortized, but is subject to impairment testing in accordance with IAS 36, Impairment of Assets.

TOA 4-19 *Suggested answer (b) Future economic benefits arising from assets that are not capable of being separately recognized or individually identified.*

See Appendix A, IFRS 3, Business Combination.

TOA 4-20 *Suggested answer (a) No No*

As a general rule, purchased goodwill is capitalized; while internally developed goodwill is expensed. In addition, PFRS 3, Business Combination provides that goodwill is no longer amortize but tested for impairment.

TOA 4-21 *Suggested answer (a) Acquisition cost only, 0 years*

PFRS 3, Business Combination, provides that at the acquisition date, the acquirer shall recognize goodwill acquired in a business combination as an asset, and initially measure that goodwill at its cost, being the excess of the cost of the business combination over the acquirer's interest in the fair value of the identifiable assets, liabilities, and contingent liabilities. Furthermore, goodwill acquired in a business combination shall not be amortized; instead, the acquirer shall test it for impairment annually or more frequently if events or changes in circumstances indicate that it might be impaired.

TOA 4-22 *Suggested answer (d) Choice of partial or full goodwill on individual basis.*

IFRS 3, Business Combination, allows an accounting policy choice, on an acquisition-by-acquisition basis, for any non-controlling interest in the acquiree to be measured either at: Fair Value (often referred to as the Full Goodwill method); or The Non-controlling interest's proportionate share of the acquiree's identifiable net assets (sometimes referred to as the Partial Goodwill method).

TOA 4-23 *Suggested answer (b) The recognition of the goodwill, which relates to the non-controlling interest and the controlling interest.*

Under the "full goodwill" method, the total fair value of the subsidiary (the fair value of the consideration transferred by the acquirer plus the fair value of the non-controlling interest) is compared with the fair value of the identifiable net assets acquired. In other words, it is a measure of the total goodwill of the business combination at acquisition date.

TOA 4-24 *Suggested answer (c) Not reverse the impairment charge*

IAS 36, Impairment of Assets, provides that an impairment loss recognized for goodwill shall not be reversed in a subsequent period.

TOA 4-25 *Suggested answer (a) Included in the carrying amount of the net assets sold.*

When a reporting unit is disposed of in its entirety, goodwill of that reporting unit (to the extent an impairment loss has not been recognized) is included in the carrying amount of the reporting unit for purposes of determining the gain or loss on disposal. Consequently, the unimpaired goodwill of each reporting unit of the acquired entity is included in the total carrying amount of that entity.

TOA 4-26 *Suggested answer (d) True True*

Acquisition cost	100,000,000
Non-controlling interest share in net assets: (85,000,000 x 20%)	17,000,000
Total	117,000,000
Less fair value of net assets of acquired company	85,000,000
Goodwill (NCI measured at its proportionate share)	32,000,000

Acquisition cost	100,000,000
Fair value of non-controlling interest (10,000,000 – 24,000,000/80% x 20%)	19,000,000
Total	119,000,000
Less fair value of net assets of acquired company	85,000,000
Goodwill (NCI measured at fair value)	34,000,000

Under PFRS 3, Business Combination, the acquirer shall, at the acquisition date, measure the acquiree's identifiable assets and liabilities at their fair value. In addition to the identifiable net assets acquired, the acquirer should recognize any

non-controlling interest in the acquiree at either, fair value; or at the non-controlling interest's proportionate share of the acquiree's identifiable net assets.

TOA 4-27 *Suggested answer (d) Combination of entities or businesses under common control.*

Paragraph 19.2, Section 19, Business Combination, provides that this section specifies the accounting for all business combination EXCEPT, among others, combination of entities or businesses under common control. Section 19 specifically provides that applying the purchase method involves the following steps: 1.) Identifying the acquirer; 2.) Measuring the cost of the business combination; and 3.) Allocating, at the acquisition date, the cost of the business combination to the assets acquired and liabilities and provisions for contingent liabilities assumed.

TOA 4-28 *Suggested answer (d) When the adjustment is probable and can be measured reliably.*

According to paragraph 19.12, Section 19, Business Combination, when a business combination agreement provides for an adjustment to the cost of the combination contingent on future events, the acquirer shall include the estimated amount of that adjustment in the cost of the combination at the acquisition date if the adjustment is probable and can be measured reliably.

TOOA 4-29 *Suggested answer (b) Recognize goodwill acquired in a business combination as an asset, amortize and test it annually for impairment*

According to paragraph 19.23, Section 19, Business Combination, after initial recognition, the acquirer shall measure goodwill acquired in a business combination at cost less accumulated amortization and accumulated impairment losses.

TOA 4-30 *Suggested answer (c) Useful life based on management's best estimate but not to exceed ten years, if the useful life cannot be established reliably.*

ragraph 19.23a, Section 19, *Business Combination (amended), if* of goodwill cannot be established reliably, the life shall be ed on management's best estimate but shall not exceed ten years.

SOLUTIONS - Problems

PROB. 4-1 *Suggested answer (a) 3,600,000*

Market value of stock issued (100,000 x 36)	3,600,000

Again, as explained earlier, all acquisition-related costs should not form part of the consideration transferred. Thus, the consideration transferred in a business combination is the total fair value at the acquisition date of the consideration given by the acquirer.

PROB. 4-2 *Suggested answer (c) Gain on bargain purchase of P8,000,000 recognized in profit or loss.*

Acquisition cost	112,000,000
Less MV of the net assets acquired (100%)	120,000,000
Gain on bargain purchase	8,000,000

The term bargain purchase (negative goodwill) is used to describe the excess of the identifiable net assets recognized in a business combination over the consideration transferred and the non-controlling interest in the acquiree. Since such an amount will not normally arise and therefore may have arisen as a result of an error in the measurement of the acquiree's net assets, the non-controlling interest or the consideration transferred, IFRS 3requires the acquirer to reassess the recognition of the identifiable net assets acquired. And if the discount still remains after the reassessment has been completed, then it should be recognized in profit or loss in the period in which the business combination took place. This treatment is required since any discount reflects the reality that a bargain purchase was made.

PROB. 4-3 *Suggested answer (a) 4,000,000*

Market value of stock issued (500,000 x 8)	4,000,000

Again, as explained earlier, all acquisition-related costs should not form part of the consideration transferred.

PROB. 4-4 *Suggested answer (a) P150,000*

Acquisition cost		620,000
Less market value of the net asset acquired:		
Cash	60,000	
Inventory at fair value	150,000	
Property and equipment (net) at fair value	380,000	
Liabilities	(120,000)	470,000
Goodwill		150,000

In a business combination appropriately accounted as purchase, the consideration given to acquire the other company may be cash, or it may include other assets or the purchaser's own securities. If the aggregate purchase price (cash purchase) exceeds the market value of identifiable assets less liabilities assumed, the difference is attributed to goodwill. It should be pointed out that goodwill is recorded only when purchased, and represents an intangible asset on the book of the purchaser. In addition, under PFRS 3, goodwill shall no longer be amortized but tested for impairment.

PROB. 4-5 *Suggested answer (a) 1,470,000*

Acquisition cost	1,960,000
Non-controlling interest share in net assets:	
(700,000 x 30%	210,000
Total	2,170,000
Less fair value of net assets of acquired company	700,000
Goodwill	1,470,000

The computation of goodwill if the non-controlling interest is measured at its share of the identifiable net assets is similar with the approach of measuring goodwill under the PFRS 3 before its revision in January 2008; as shown below:

Acquisition cost	1,960,000
Less market value of net assets acquired	
(700,000 x 70%)	490,000
Goodwill	1,470,000

PROB. 4-6 *Suggested answer (c) 187,500*

Average earnings (800,000/5)	160,000
Less normal earnings	145,000

Excess earnings	15,000
Multiply by capitalization rate	8%
Goodwill	187,500

Goodwill may be computed using either direct valuation approach or inidirect valuation approach. Under the direct valuation approach, the excess of acquisition cost over the market value of the net asset acquired is goodwill; while under the indirect valuation approach, goodwill may be determined in various ways. One of which is the capitalization of the excess earning. Excess earnings is the excess of average earnings over the normal earnings.

PROB. 4-7 *Suggested answer (d) P8,000,000*

Fair value of preferred stock issued – Minor Co.	8,000,000

In applying the acquisition method, the cost to the purchasing entity of acquiring another entity is the amount of cash paid or the fair value of other assets given up, liability assumed, or equity instrument issued in the transaction.

Again, PFRS 3, Business Combination, provides that all acquisition related costs shall be expensed, except the cost of issuing equity securities which reduce the proceeds from the equity issue; and costs to issue debt securities, which are included in the measurement of financial liabilities.

Therefore, the fair value of preferred stock given up is used to measure this transaction, except the preferred shares issued to an individual as finder's fee, which is expensed. Accordingly, the acquirer should recognize an increase in net assets at the acquisition date, because of the issuance of preferred stock.

PROB. 4-8 *Suggested answer (c) P22,500,000*

Again, the net assets of the subsidiary acquired by an acquirer shall be recognized at fair values. Specifically, the fair value of property, plant and equipment shall be the market value the amount which an entity will pay, say, an asset when it is exchanged between unrelated and willing parties, not in forced sale. The asset at fair value is being added to similar asset of the acquirer.

PROB. 4-9 *Suggested answer (d) Goodwill: P580,000*
Gain on bargain purchase: None

	Swain	Hadji
Acquisition costs	1,420,000	300,000
Less market value of net assets acquired		
(70% x 1,200,000)	840,000	
(65% x 640,000)		416,000
Goodwill (Gain on bargain purchase)	580,000	(116,000)

Since the computation of goodwill if the non-controlling interest is measured at its share of the identifiable net assets is similar with the approach of measuring goodwill under the PFRS 3 before its revision in January 2008, that approach was used for purposes of simplicity. According to PFRS 3, Business Combination, goodwill is the excess of the consideration transferred plus the amount of any non-controlling interest in the acquiree over the identifiable net assets and liabilities recognized. It is to be recognized as an asset of the acquiring entity in the statement of financial position.

The term gain on bargain purchase or negative goodwill is used to describe the excess of the identifiable net assets recognized in a business combination over the consideration transferred and the non-controlling interest in the acquiree. It is recognized in profit or loss in the period in which the business combination took place; thus, no amount of which shall be presented in the statement of financial position.

PROB. 4-10 *Suggested answer (a) P2,100,000*

Fair value of the consideration transferred:		
Cash	4,000,000	
Shares issued (10,000,000 x 1.20)	12,000,000	16,000,000
Less: Fair value of net assets acquired		13,900,000
Goodwill		2,100,000

In a business combination, goodwill is the excess of the sum of the acquisition-date fair value of the assets transferred by the acquirer, the liabilities incurred by the acquirer to former owners of the acquiree and equity interests issued by the acquirer, over the net of the acquisition date amounts of the identifiable assets acquired and the liabilities assumed. Acquisition-related cost is

expensed in the periods incurred except cost to issue debt or equity securities. The cost of issuing debt securities shall be included in the measurement of financial liability; while the share issuance cost is deducted from share premium or from retained earnings.

PROB. 4-11

a. *Suggested answer(a) P6,800,000*

Total assets of Com Co. and Pol Co. before the purchase (4,000,000 + 2,500,000)	6,500,000
Add increase in appraised value of Pol Co.'s assets	300,000
Total assets/ liabilities & stockholders' equity	6,800,000

When a business combination is appropriately accounted under acquisition method, there is a new basis of accountability for the assets acquired. With the acquisition of assets through purchase, assets should be recorded at current fair values, which is their cost to the buyer that need not coincide with the values reported on the books of the seller.

b. *Suggested answer (d) P4,000,000*

Com Co.'s capital stock before purchase	2,000,000
Capital stock issued by Com Co. in the combination [(2,500,000 + 300,000) - 800,000]	2,000,000
Com Co.'s capital stock reflecting the combination	4,000,000

Since Com Co.'s capital stock is no par/ stated value, the capital stock to be issued by Com Co. for purposes of business combination is equal to the fair market value of Pol Co.'s net assets (as mentioned in the problem).

PROB. 4-12 *Suggested answer (a) 25,000,000*

Acquisition cost	160,000,000
Less increase in provisional fair value	135,000,000
Goodwill	25,000,000

The standard requires the acquirer should assess the identifiable assets and liabilities acquired by the end of the reporting period in which the combination takes place. However, if it is not practicable for the assessment to be finalized in this time scale, the acquirer is required to make a provisional assessment at the end of the reporting period and adjustment should be made, which may result to increase/decrease in goodwill or gain on bargain purchase.

PROB. 4-13 *Suggested answer (b) Decreased by P5,000*

Trademark amortization (100,000/10 x 6/12)	5,000

The identifiable assets and liabilities acquired by an acquirer should be reassessed by the end of the reporting period in which the combination takes place. However, when it is not practicable for the assessment to be finalized in this time scale, the acquirer is required to make a provisional assessment at the end of the first reporting period. These provisional values should subsequently be finalized within the measurement period and adjustments should be made directly to the identifiable net assets, the consideration transferred and goodwill as well. The measurement period ends as soon as the acquirer obtains enough information to finalize the provisional amounts, but in any event does not exceed one year from the date of acquisition. Adjustments that arise after the end of the measurement period should be recognized as revision of estimates and therefore recognized in profit or loss in the current and future periods. Where error is identified, retrospective treatment is required.

Given the finalization of the fair value of the trading rights is made after the end of the measurement date (more than 12 months), so it is recognized in profit or loss prospectively from September 30, 2021 and has no effect in 2020 net income.

On the other hand, the finalization of the fair value of the trademarks is made within 12 months from the acquisition date, so it is considered to be related to that date. Accordingly, the increase in carrying amount by P100,000 (P500,000-P400,000) will reduce the recorded goodwill by the same amount, and amortization of which in the amount of P5,000 will decreased the 2020 net income. Note that under the current standards, goodwill is no longer amortized but tested for impairment.

PROB. 4-14

1. *Suggested answer: (a) 18,000*

Initial measurement of existing Investment, January 1, 2020	90,000
Add share in net income of associate (40,000 x 40%)	12,000
Book value of existing investment, June 30, 2020	102,000
Less fair value of existing investment (30,000 x 4)	120,000
Gain on remeasurement of existing investment resulting from step acquisition	18,000

2. *Suggested answer: (d) 30,000*

Fair value of consideration transferred for 60,000 shares	240,000
Fair value of existing investment (30,000 x 4)	120,000
Fair value of noncontrolling interest in the net asset of the Acquiree	50,000
Total	410,000
Less fair value of net assets of the acquiree 400,000 – 50,000 + 30,000	380,000
Goodwill arising from business combination achieved in stages	30,000

PROB. 4-15 *Suggested answer (a) 3,000,000*

Before control is obtained, an acquirer accounts for its investment in the equity interests of an acquiree in accordance with the nature of the investment by applying the relevant standard (e.g., IAS 28, Investment in Associates and Joint Venture, IAS 39, Financial Instruments: Recognition and Measurement or IFRS 9, Financial Instruments). As part of accounting for business combination, the acquirer remeasures any previously held interest at fair value and takes this into account in the determination of goodwill. Any resulting gain or loss is recognized in profit or loss or other comprehensive income, as appropriate. Thus, the amount of gain to be recognized is the increase in fair value of interest acquired in the amount of P3,000,000 (P15,000,000 – 12,000,000).

PROB. 4-16 *Suggested answer (b) 20,400,000*

Goodwill (given)		1,000,000
Add: Fair value of net assets acquired		
(18,000,000 + 2,000,000)	20,000,000	
Deferred tax liability	(600,000)	19,400,000
Consideration paid by Igloo Co.		20,400,000

When an asset in a business combination was revalued at fair value but its tax base remains the same, this would give rise to a taxable temporary difference. Recognizing deferred tax asset and deferred tax liability in a business combination affects the amount of goodwill or gain from bargain purchase. The recognition of deferred tax asset will increase the fair value of identifiable net asset; conversely, deferred tax liability will decrease the fair value identifiable net asset. This impacts on the goodwill or gain from bargain purchase, which is the difference between the acquisition cost and the fair value of the identifiable net assets acquired.

Chapter 5

CONSOLIDATED AND SEPARATE FINANCIAL STATEMENTS

A group of entities presents financial information about their activities as if it was a single economic entity; such financial statements are known as the consolidated financial statements. Consolidated financial statements are prepared on the basis that the group is a single economic entity, by aggregating the transactions and balances of the parent and all its subsidiaries. A group is simply a collection of entities, where one, *the parent*, controls the activities of the others, its subsidiaries.

In June 2008, the IASB amended IAS 27, *Consolidated Financial Statements and Accounting for Investments in Subsidiaries*. This amendment, which related to accounting for non-controlling interests and the loss of control of subsidiaries, was done in conjunction with amendments to IFRS 3, *Business Combinations*.

In May 2011, the IASB issued IFRS 10, *Consolidated Financial Statements* to replace IAS 27; and accordingly, issued a revised IAS 27 with a modified title – *Separate Financial Statements* (see later part of this chapter).

In June 2012, IFRS 10 was amended by *Consolidated Financial Statements, Joint Arrangements* and *Disclosure of Interests in Other Entities: Transition Guidelines.* And in October 2012, IFRS 10 was amended by *Investment Entities*, which defined an investment entity and introduced an exception to consolidating particular subsidiaries for investment entities. It also introduced the requirement that an investment entity measures those subsidiaries at fair value through profit or loss in accordance with IFRS 9, *Financial Instruments* in its consolidated and separate financial statements. IFRS 10 establishes principles for the presentation and preparation of consolidated financial statements when an entity controls one or more entities.

In this chapter, the consolidated financial statements topic shall be discussed using IFRS 10, *Consolidated Financial Statements*; and the separate financial statements topic shall be discussed using IAS 27, *Separate Financial Statements.*

Principles of Control

The IFRS 10 defines the principle of control and establishes control as the basis for determining which entities are consolidated in the consolidated financial statements. An investor controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Thus, the principle of control sets out the following three elements of control:

- Power over the investee;
- Exposure, or rights, to variable returns from involvement with the investee; and
- The ability to use power over the investee to affect the amount of the investor's returns.

Presentation of Consolidated Financial Statements

The standard requires every parent to prepare a set of consolidated financial statements. An exception to this requirement arises in circumstances where the shareholders of the parent will gain limited benefit from the preparation of consolidated financial statements at this level, for example, where the parent entity is itself a wholly-owned subsidiary. The exception also applies where a partially-owned subsidiary has informed the other shareholders of the proposal not to prepare consolidated financial statements and there were no objections. The ultimate parent or the intermediate parent if one exists, is required to prepare consolidated financial statements that are publicly available and in accordance with IFRS for this exception to be available.

This exception cannot be utilized where the parent has debt or equity instruments traded on any public market (or in the process of issuing debt or equity in a public market). In such circumstances, its consolidated financial statements are likely to have a wider circulation and therefore should be prepared.

Consolidation Procedures

In preparing consolidated financial statements, an entity combines the financial statements of the parent and its subsidiaries line by line by adding together like items of assets, liabilities, equity, income and expenses. A number of further steps are then required to ensure that information is not double counted and that the consolidated

financial statements of the group fairly present the results and position of the group as a whole.

The parent entity will have an asset line item in its own financial statements which represents the cost of acquiring an investment in subsidiary. The carrying amount of the parent's investment, together with the parent's portion of equity of the subsidiary, is eliminated.

Any excess of the cost of investment over the parent's share of a subsidiary's equity at the time of acquisition is *goodwill,* which is recognized in the consolidated financial statements as an asset, in accordance with IFRS 3. Conversely, any excess of the parent's share of a subsidiary's equity over the cost of investment, at the time of acquisition, is a gain from a bargain purchase, which is attributed to the acquirer and recognized in profit or loss.

The aggregation of each line item in the statement of financial position will lead to equity which represents that of the total of all entities in the group. This will include retained earnings that were generated both before and after the acquisition. Retained earnings generated before a subsidiary was acquired by its current parent should not be reported as part of the group results. The parent's share of a subsidiary equity at the time of acquisition should therefore be *eliminated.*

Intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between entities of the group must be eliminated in full. In other words, profits or losses resulting from intra-group transactions that are recognized in assets, such as inventory and fixed assets, are eliminated in full. (*This intra-group transaction will be discussed in detail in following sections of this chapter.*)

Acquisition of a further ownership interest in a subsidiary after obtaining control is accounted for as an equity transaction and no gain, loss or adjustment to goodwill is recognized. In such circumstances, the carrying amounts of the controlling and non-controlling interests shall be adjusted to reflect the changes in their relative interests in the subsidiary. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received shall be recognized directly in equity and attributed to the owners of the parent.

Non-Controlling Interest

The ownership of the profits and net assets of subsidiaries included in the aggregation process should be analyzed between the parent entity shareholders and the non-

controlling interest (minority interest). The non-controlling interest is the portion of the results and financial position of subsidiaries that does not belong to the parent. Simply stated, it is the interest of the minority group, who refused to sell their interest to the parent, accordingly, it is the portion of the profit or loss and net assets of a subsidiary attributable to equity interest that are not owned directly or indirectly through subsidiaries by the parent. IFRS 10 provides that minority interests shall be presented in the consolidated balance sheet within equity, separate from the parent shareholders' equity. An entity shall attribute the profit or loss and each component of other comprehensive income to the owners of the parent and to the non-controlling interests. The total comprehensive income is split between the owners of the parent and the non-controlling interest even if this results in the non-controlling interest having a deficit balance.

When the proportion of the equity held by non-controlling interests changes, an entity shall adjust the carrying amounts of the controlling and non-controlling interests to reflect the changes in their relative interest in the subsidiary. The entity shall recognize directly in equity any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received, and attribute it to the owners of the parent.

Note that IFRS 3, *Business Combination*, provides that the acquirer shall measure the acquiree's identifiable net assets at fair value at the acquisition date. In addition to the identifiable net assets acquired, the acquirer should recognize any non-controlling interest in the acquiree at either *Fair Value* or *at the Non-controlling Interest's Proportionate Share of the Acquiree's Identifiable Net Assets.*

Adjustments

As the consolidated financial statements present the information for the group as a single entity, any transactions or balances arising between different entities in the group should be eliminated. This treatment is required because the single entity cannot transact business within itself or owe itself money.

As mentioned in the preceding section, profits or losses resulting from intra-group transaction that are recognized in assets are eliminated in full. Where sales have been made between group entities, these should be eliminated in the revenue and costs of sales lines of the aggregated results of the group. Similarly where balances exist at the end of the year, the assets and corresponding liability should be eliminated.

A more complex adjustment is necessary where goods are sold between group entities and they are still held by one of the entities at the end of the year. Any element of profit created by these internal transactions is considered to be unearned as far as the single economic entity is concerned and should therefore be eliminated. The inventories themselves should be reduced to their original cost to the group.

Because the parent controls the activities of subsidiaries, the full amount of such transactions and balances arising within a group should be eliminated even if the seller is a subsidiary in which there is a non-controlling interest.

If non-current assets, such as property, have been sold by one group entity to another, adjustment is necessary to eliminate the unrealized profit or loss on the sale. In addition, the depreciation should be adjusted to the value it would have been had no sale taken place.

Reporting Dates and Consistent Accounting Policies

Since the consolidated financial statements are prepared on the basis that the group is a single economic entity, the financial statements of the parent and its subsidiaries should be made up to the same reporting date. If a subsidiary has a year-end different to that of its parent, it is required to prepare additional financial information for consolidation purposes as of the same date of the parent entity, unless it is impractical to do so. In this case, adjustments should be made for significant transactions and events between the subsidiary's reporting date and that of its parent. Where different accounting dates exist for the parent and one of its subsidiaries, the difference in reporting dates should not exceed three months, and the length of the reporting periods and any difference between the dates of the financial statements shall be the same from period to period.

It is also essential that uniform accounting policies are applied by all entities in the group. If group accounting policies are not adopted in the subsidiaries' own financial statements, adjustments should be made to reflect the effect of the group policies for inclusion in consolidated financial statements to ensure conformity with the group's accounting policies.

Ceasing to be a Subsidiary

Where a change in a parent's ownership interest in a subsidiary does not lead to the loss of control, it is recognized as an equity transaction. The carrying amounts of the

controlling and non-controlling interest should be adjusted to reflect the change in levels of ownership. Any difference between the consideration received and the adjustment to the non-controlling interest is recognized directly in equity.

When a parent loses control of a subsidiary, the subsidiary should be excluded from consolidation from that date. But the results of the subsidiary should be included in the consolidated financial statements up to that date, since this reflects the reality that until that point the subsidiary was still a group entity.

If the parent losses control of a subsidiary, it shall derecognize the assets (including any goodwill) and liabilities of the subsidiary at their carrying amounts at the date when control is lost; and the carrying amount of any non-controlling interests (including any components of other comprehensive income attributable to them). Consequently, the parent shall recognize the fair value of the consideration received, if any, that resulted in the loss of control; the distribution of shares of the subsidiary to owners, if any, that resulted in the loss of control; and any investment retained in the former subsidiary at its fair value at the date when control is lost.

If any amounts have been recognized in other comprehensive income of the consolidated financial statements in relation to the subsidiary in which the parent has lost control, these amounts should be reclassified to profit or loss or transferred directly to retained earnings in accordance with the relevant accounting standard.
Any resulting difference, from the above circumstances, shall be recognized as a gain or loss in profit or loss attributable to the parent.

Once and entity is no longer a subsidiary, it should be accounted for as an investment, in accordance with the appropriate accounting standard.

Investment Entities: Exception to Consolidation

IFRS 10, *Consolidated Financial Statements* contains special accounting requirements for investment entities. Where an entity meets the definition of an Investment Entity, it does not consolidate its subsidiaries or apply IFRS 3, *Business Combination* when it obtains control or another entity. The exemption from consolidation only applies to the investment entity itself. Accordingly, a parent of an investment entity is required to consolidate all entities that it controls, including those controlled through an investment entity subsidiary, unless the parent itself is an investment entity.

However, an investment entity is still required to consolidate a subsidiary where that subsidiary provides services that relate to the investment entity's investment activities. The standard clarifies that this relates to a subsidiary that is not itself an investment entity and whose main purpose and activities are providing services that relate to the investment entity's investment activities.

An entity is required to consider all facts and circumstances when assessing whether it is an investment entity, including its purpose and design. IFRS 10 provides that an investment entity should have the following typical characteristics:

- It has more than one investment.
- It has more than one investor.
- It has investors that are not related parties of the entity.
- It has ownership interest in the form of equity or similar interests.

It should be noted that the absence of any of these typical characteristics does not necessarily disqualify an entity from being classified as an investment entity.

Because an investment entity is not required to consolidate its subsidiaries, intra-group related party transactions and outstanding balances are not eliminated. An investment entity is required to measure an investment in subsidiary at fair value through profit or loss in accordance with IFRS 9, *Financial Instruments*.

SEPARATE FINANCIAL STATEMENTS

IAS 27, *Separate Financial Statements,* was reissued in May 2011 and applies to annual periods beginning on or after 1 January 2013, superseding IAS 27, *Consolidated and Separate Financial Statements*. This IAS, as amended in 2011, outlines the accounting and disclosure requirement for separate financial statements, which are financial statements prepared by a parent, or an investor in a joint venture or associate, where whose investments are accounted for either cost or in accordance with IAS 39, *Financial Instruments: Recognition and Measurement*, or IFRS 9, *Financial Instruments*. It also outlines the accounting requirements for dividends and contains numerous disclosure requirements. In August 2014, IAS 27 was amended by equity method in separate financial statements effective for annual periods beginning on or after 1 January 2016, with early application permitted. Actually, the option to apply the equity method had been removed during the 2003 revision of IAS 27, *Consolidated and Separate Financial Statements*. However, constituent feedback led the IASB to reconsider the option to reinstate the equity method in separate financial statements.

In general, separate financial statements are required by local regulation or other financial statement users, not by IFRS. In some jurisdictions, corporate laws also require the use of equity method in separate financial statements to measure investments in subsidiaries, joint ventures and associates. Accordingly, in jurisdictions that apply IFRS and have the equity method requirements, two sets of financial statements need currently be prepared to meet the requirements of both IAS 27 and local laws.

Given that the definition of separate financial statements has long been an area of confusion, the IASB has made changes to confirm that separate financial statements are those presented in addition to consolidated financial statements or in addition to the financial statements of an investor that does not have investments in subsidiaries but has investment in associates or joint ventures in which the investment in associates or joint ventures are required by IAS 28, *Investment in Associates and Joint Ventures* to be accounted for using the equity method.

The IASB refrained from providing transitional relief as entities should be able to use the information that is used for the consolidation of subsidiaries in their consolidated financial statements without performing any additional procedures. Also, the IASB concluded that information in the financial statements of ultimate, or intermediate, parent could be used on the initial application of the amendments. Finally, the IASB points out in its Basis for Conclusions, that the application of the equity method in separate financial statements is optional and not mandatory.

When an entity prepares separate financial statements, investment in subsidiaries, associates, and jointly controlled entities are accounted for either:

- At cost, or
- In accordance with IFRS 9, *Financial Instruments (or IAS 39, Financial Instruments: Recognition and Measurement* for entities that have not yet adopted IFRS 9), or
- Using the equity method as described in IAS 28, *Investment in Associates and Joint Ventures.*

The entity applies the same accounting for each category of investments. Investments that are accounted for at cost and classified as held for sale in accordance with IFRS 5, *Non-current Assets Held for Sale and Discontinued Operations* are accounted for in accordance with that IFRS. Investments carried at cost should be measured at the lower of their carrying amount and fair value less cost to sell. The measurement of investments accounted for in accordance with IFRS 9 is not changed in such circumstances. If a parent investment entity is required, in accordance with IFRS 10, *Consolidated Financial Statements*, to measure its investment in a subsidiary at fair

value through profit or loss in accordance with IFRS 9 or IAS 39, it is also required to account for its investment in a subsidiary in the same way in its separate financial statements. When a parent ceases to be an investment entity, the entity can account for an investment in a subsidiary at cost (based on fair value at the date of change or status) or in accordance with IFRS 9. (*Note that IFRS 9, Financial Instruments will largely replace IAS 39, Financial Instruments: Recognition and Measurement, for annual periods beginning on or after January 1, 2018.)*

An entity recognizes a dividend from a subsidiary, joint venture or associate in profit or loss in its separate financial statement when its right to receive the dividend is established. Accounting for dividends where the equity method is applied to investment in joint ventures and associates is specified in IAS 28, *Investment in Associates and Joint Ventures.*

Specified accounting applies in separate financial statements when a parent reorganizes the structure of its group by establishing a new entity as its parent in a manner satisfying the following criteria:

1. The new parent obtains control of the original parent by issuing equity instruments in exchange for existing equity instruments of the original parent;

2. The assets and liabilities of the new group and the original group are the same immediately before and after the reorganization; and

3. The owners of the original parent before the reorganization have the same absolute and relative interests in the net assets of the original group and the new group immediately before and after the reorganization.

Where these criteria are met, and the new parent accounts for its investment in the original parent are cost, the new parent measures the carrying amount of its share of the equity items shown in the separate financial statements of the original parent at the date of the reorganization.

When a parent elects not to prepare consolidated financial statements and instead prepares separate financial statements, it shall disclose in those separate financial statements the following:

1. The fact that the financial statements are separate financial statements; that the exemption from consolidation has been used; the name and principal place of business of the entity whose consolidated financial statements that comply with IFRS have been produced for public use; and the address where those consolidated financial statements are obtainable;

2. A list of significant investments in subsidiaries, jointly controlled entities, and associates, including the name, principal place of business, proportion of ownership interest and, if different, proportion of voting rights; and

3. A description of the method used to account for the foregoing investments.

ACCOUNTING FOR SMALL AND MEDIUM-SIZED ENTITIES (SMEs)

IFRS/PFRS for SMEs, Section 9, *Consolidated and Separate Financial Statements* provides that consolidated financial statements are required when a parent company controls another entity (a subsidiary). Control is the power to govern financial and operating policies to obtain benefits. More than 50% of voting power is presumed to have control. However, although sometimes an entity owns less than 50%, control may still exists provided it has power to govern by agreement or statute, or power to appoint majority of the board, or power to cast majority votes at board meetings. Control can be achieved by currently exercisable options that, if exercised, would result in control.

A subsidiary is not excluded from consolidation because:

- Investor is a venture capital organization.
- Subsidiary's business activities are dissimilar to those of parent or other subsidiaries.
- Subsidiary operates in a jurisdiction that imposes restrictions on transferring cash or other assets out of the jurisdiction.

An entity shall prepare consolidated financial statements that include the entity and any Special Purpose Entities (SPEs) that are controlled by that entity. A Special Purpose Entity is an entity created to accomplish a narrow objective (e.g., to effect a lease, undertake research and development activities or securitize financial assets). Such an SPE may take the form of a corporation, trust, partnership or unincorporated entity. Often, SPEs are created with legal arrangements that impose strict requirements over the operations of the SPEs.

However, consolidated financial statements are not required, even if a parent-subsidiary relationship exists if:

- Subsidiary was acquired with intent to dispose within one year. Such subsidiary shall be accounted at fair value with changes in fair value

recognized in profit or loss, if the fair value of the shares can be measured reliably; or otherwise at cost less impairment.

- Parent itself is a subsidiary and its parent or ultimate parent uses IFRSs or IFRS for SMEs

Consolidation procedures:

- Combine the financial statements of the parent and its subsidiaries line by line by adding together like items of assets, liabilities, equity, income and expenses.
- Eliminate intracompany transactions and balances.
- Uniform reporting date unless impracticable
- Uniform accounting policies
- Non-controlling interest is presented as part of equity
- Losses are allocated to a subsidiary even if non-controlling interest goes negative

MULTIPLE CHOICE – Theory of Accounts

TOA 5-1 (AICPA)

When a parent-subsidiary relationship exists, consolidated financial statements are prepared in recognition of the accounting concept of

a. Reliability
b. Materiality
c. Legal entity
d. Economic entity

TOA 5-2 (AICPA)

Which one of the following is not necessarily a post-combination characteristic of a legal acquisition?

a. The combining firms remain separate legal entities.
b. A parent-subsidiary relationship exists.
c. The acquiring firm owns 100% of the voting stock of the acquired firm.
d. The combining firms are under common economic control.

TOA 5-3 (IFRS)

A "group" for consolidation purposes is

a. A parent and all its subsidiaries.
b. An entity that has one or more subsidiaries.
c. An entity, including an unincorporated entity such as partnership that is controlled by another entity.
d. An entity that obtains control over entities or businesses.

TOA 5-4 (AASB)

Which of the following statements is consistent with the principle of control as defined by IFRS 10, *Consolidated Financial Statements*?

a. The investor must be exposed to a return from the investee.
b. The investor has the ability to use its power over the investee to affect the investor's returns from the investee.
c. If two or more investors have existing rights to direct different relevant activities, no investor can have control over the investee.
d. An investor's power over an investee relates to their ability to determine the amount of returns received from the investee.

TOA 5-5 (AASB)

IFRS 10, *Consolidated Financial Statements* sets out how to determine whether one entity has control over another entity. Which of the following statements is in accordance with the IFRS 10 requirements and guidance for control to exist over another entity?

a. The investor must have greater that 50% of the voting rights in the other entity.
b. The investor must be the only party that receives variable returns from the investee.
c. The investor must have existing rights that give it the current ability to direct relevant activities.
d. The investor must be represented on the board of directors or governing body of the other entity.

TOA 5-6 (IFRS)

It is the entity that has the controlling financial interest.

a. Investor
b. Parent
c. Associate
d. Affiliate

TOA 5-7 (Adapted)

A parent company owns a 90% interest in a subsidiary at the start of the year and during the year sells a 10% interest to reduce its ownership percentage to 80%. The most popular view of the transaction under the parent company concept is that

a. It is likened to a treasury stock transaction, which may not result in a gain or loss.
b. It is a sale of an investment at a gain or loss.
c. It is a transaction between the controlling and minority ownership interests and has no effect on consolidated income.
d. The increase or decrease in equity as a result of the sale is an adjustment to donated capital.

TOA 5-8 (Adapted)

Which of the following is not a reason for a parent to lose control of a subsidiary?

a. Where the subsidiary issues additional shares to parties other than the parent.
b. Where the subsidiary issues bonus shares on a pro-rata basis.
c. When the parent makes decision to sell its controlling interest in the subsidiary to another party.
d. Where the subsidiary issues additional shares to parties other than the parent.

TOA 5-9 (IFRS)

An entity acquired an investment in a subsidiary with the view to dispose of this investment within six months. The investment in the subsidiary has been classified as held for sale and is to be accounted for in accordance with PFRS 5. The subsidiary has never been consolidated. How should the investment in the subsidiary be treated in the financial statements?

a. Purchase accounting should be used.
b. Equity accounting should be used.
c. The subsidiary should not be consolidated but PFRS 5 should be used.
d. The subsidiary should remain off balance sheet.

TOA 5-10 (AICPA)

Snow White Co. is a wholly owned subsidiary of Fantasy Co. Both companies have separate general ledgers and prepare separate financial statements. Snow White Co. requires stand-alone financial statements. Which of the following statements is correct?

a. Consolidated financial statements should be prepared for both Snow White and Fantasy.
b. Consolidated financial statements should only be prepared by Fantasy and not by Snow White.
c. After consolidation, the accounts of both Fantasy and Snow White should be changed to reflect the consolidated totals for future ease in reporting.
d. After consolidation, the accounts of both Fantasy and Snow White should be combined together into one general ledger accounting system for future ease in reporting.

TOA 5-11 (AICPA)

A subsidiary, acquired for cash in a business combination, owned inventories with a market value greater than the book value as of the date of combination. A consolidated balance sheet prepared immediately after the acquisition would include this difference as part of

a. Deferred credits
b. Goodwill
c. Inventories
d. Retained earnings

TOA 5-12 (AICPA)

A subsidiary was acquired for cash in a business combination. The purchase price exceeded the fair value of identifiable net assets. The acquired company owned equipment with a market value in excess of the carrying amount as of the date of combination. A consolidated balance sheet prepared would

a. Report the unamortized portion of the excess of the market value over the carrying amount of the equipment as part of goodwill.
b. Report the unamortized portion of the excess of the market value over the carrying amount of the equipment as part of plant and equipment.
c. Report the excess of the market value over the carrying amount of the equipment as part of plant and equipment.
d. Not report the excess of the market value over the carrying amount of the equipment because it would be expensed as incurred.

TOA 5-13 (AICPA)

Perth Co. acquired controlling interest in Sydney Co. is a legal acquisition. Which one of the following could not be part of the entry to record the acquisition?

a. Debit: Investment in Sydney Co.
b. Debit: Goodwill
c. Credit: Cash
d. Credit: Common Stock

TOA 5-14 (AASB)

On the acquisition of a subsidiary, purchased goodwill should

a. Be recognized separately in the financial statements of the investor.
b. Be recorded as a consolidation adjusting entry.
c. Be recorded separately in the financial statements of the subsidiary.
d. Not be separately recognized in any financial statements.

TOA 5-15 (IFRS)

It is that portion of the profit or loss and net assets of a subsidiary attributable to equity interest that are not owned directly or indirectly through subsidiaries by the parent.

a. Non-controlling interest
b. Controlling interest
c. Residual interest
d. Subsidiary interest

TOA 5-16 (Adapted)

Calculating goodwill for a subsidiary that has a non-controlling interest involves:

a. Taking the parent entity's share of the fair value of the identifiable net assets of the subsidiary and deducting it from the fair value of the consideration paid.
b. Dividing the fair value of the consideration paid for the subsidiary by the percentage ownership of the parent entity and deducting the fair value of the identifiable net assets of the subsidiary from that amount.
c. Taking the book value of equity of the subsidiary and deducting the fair value of the consideration paid for the subsidiary.
d. Dividing the fair value of the identifiable net assets of the subsidiary by the percentage ownership of the parent entity and deducting this amount from the fair value of the consideration paid.

TOA 5-17 (Adapted)

Calculating the non-controlling interest in the operating profit and opening retained earnings of a subsidiary is done by:

a. Taking the operating profit and opening retained earnings figures of the subsidiary and multiplying them by the percentage ownership held by the non-controlling interest.
b. Adjusting the operating profit and opening retained earnings of the

subsidiary for any intragroup transactions and multiplying them by the percentage ownership held by the non-controlling interest.

c. Adjusting the operating profit of the subsidiary for any unrealized profit or expense of the subsidiary as a result of any intragroup transactions and multiplying this and the opening retained earnings by the percentage ownership held by the non-controlling interest.

d. Adjusting the opening retained earnings and the opening profit for any unrealized profit or expense of the subsidiary as a result of intragroup transactions and multiplying this by the percentage ownership held by the non-controlling interest.

TOA 5-18 (Adapted)

Which of the following statements is incorrect with regards to non-controlling interests in subsidiaries?

a. The requirement to eliminate the effects of intragroup transactions holds whether or not there are non-controlling interests.

b. The non-controlling interest's share in the dividends paid or proposed by the subsidiary is eliminated on consolidation.

c. The non-controlling interest's share of the profits of the subsidiary is calculated after adjustments to eliminate income and expenses of the subsidiary that are unrealized from the economic entity's perspective.

d. Management fees paid in an intragroup transaction are considered realized when determining non-controlling interests in a subsidiary.

TOA 5-19 (Adapted)

Which of the following situations, involving eliminations as part of the consolidation process, would not have implications for the calculation of non-controlling interest?

a. The sale of a non-current asset by the subsidiary to the parent.

b. The payment of a management fee by the subsidiary to the parent.

c. The sale of inventory by the parent to the subsidiary.

d. The payment of a management fee by the subsidiary to the parent and the sale of inventory by the parent to the subsidiary.

TOA 5-20 (Adapted)

When group members do not apply the same accounting methods, the consolidation process requires which of the following to be done?

a. All group members must change their accounting policies to be consistent.
b. Adjustments must be made on consolidation to remove the effects of the different policies.
c. Two sets of consolidated accounts need to be presented; the first, done on the basis of the inconsistent policies, the second, done after the subsidiaries have adjusted their policies in line with the parent.
d. A choice is to be made by the parent's management between any of the three other given answers.

TOA 5-21 (AICPA)

Perez, Inc. owns 80% of Senior, Inc. During 2019, Perez sold goods with a 40% gross profit to Senior. Senior sold all of these goods in 2019. For 2019 consolidated financial statements, how should the summation of Perez and Senior income statement items be adjusted?

a. Sales and cost of goods sold should be reduced by the intercompany sales.
b. Sales and cost of goods sold should be reduced by 80% of the intercompany sales.
c. Net income should be reduced by 80% of the gross profit on intercompany sales.
d. No adjustment is necessary.

TOA 5-22 (AICPA)

Smith Co. owns 100% of the outstanding common stock of the Veron Co. During 2019, Smith sold merchandise to Veron that Veron, in turn, sold to unrelated firms. There were no such goods in Veron's ending inventory. However, some of the intercompany purchases from Smith had not yet been paid. Which of the following amounts will be incorrect in the consolidated statements if no adjustments are made?

a. Inventory, accounts payable, net income.
b. Inventory, sales, cost of goods sold, accounts receivable.
c. Sales, cost of goods sold, accounts receivable, accounts payable.
d. Accounts receivable, accounts payable.

TOA 5-23 (AASB)

In accordance with IFRS 10, *Consolidated Financial Statements,* and IFRS 12, *Disclosure of interests in Other Entities,* a consolidated statement of financial position (or notes thereto) would not present information relating to

a. Investment in Subsidiaries.
b. Goodwill acquired by the group.
c. Loans to entities not related to the group.
d. Non-controlling interests' share of consolidated net assets.

TOA 5-24 (Adapted)

On consolidation, the investment in subsidiary, shown in the investor's books, shall be eliminated in full against which of the following"

a. Assets and liabilities of the subsidiary.
b. Post-acquisition shareholders' funds of the subsidiary.
c. Share capital of the subsidiary acquired by the parent only.
d. Parent's share of the subsidiary's equity.

TOA 5-25 (AICPA)

Which one of the following is not a characteristic associated with intercompany transactions?

a. Intercompany transactions must be eliminated in the consolidating process.
b. Gains and losses must be eliminated in the consolidating process.
c. Transactions that originate with a subsidiary must be eliminated in the consolidating process.
d. Transactions between two subsidiaries to be consolidated with the same parent do not need to be eliminated.

TOA 5-26 (AICPA)

In 2020, Popsie Co. acquired 80% of the voting stock of Sonny Co. in a legal acquisition. Which one of the following is least likely to be a type of intercompany balance that results from transactions between Popsie and Sonny during 2020?

a. Receivable
b. Inventory
c. Goodwill
d. Revenue

TOA 5-27 (AICPA)

Which one of the following kinds of accounts is least likely to be eliminated through an eliminating entry on the consolidating worksheet?

a. Receivables
b. Investment
c. Goodwill
d. Payables

TOA 5-28 (AICPA)

Palace Co. owns 80% of Super Co.'s outstanding common stock. Super, in turn, owns 10% of Palace's outstanding common stock. What percentage of the common stock cash dividends declared by the individual companies should be reported as dividends declared in the consolidated financial statements?

	Dividends declared by Palace	Dividends declared by Super
a.	90%	0%
b.	90%	20%
c.	100%	0%
d.	100%	20%

TOA 5-29 (AICPA)

Porch Co. owns a 90% interest in the Screen Co. Porch sold Screen a milling machine on January 1, 2019 for P50,000 when the book value of the machine on Porch's books was P40,000. Porch financed the sale with Screen signing a 3 year, 8% interest, level payment, monthly payment loan for the entire P50,000. The machine will be used for 10 years and depreciated using the straight line method. The gain on the machine sale will appear in the consolidated income statement

a. Never.
b. In the year of sale.
c. Spread over 3 years.
d. Spread over 10 years

TOA 5-30 (AICPA)

Enron Co. owns a 100% interest in the common stock of the Diets Co. On January 1, 2019, Enron sold Diets a fixed asset that Diets will use over a 5- year period. The asset was sold at a P5,000 profit. In the consolidated statements, this profit will

a. Not be recorded.
b. Be recognized over 5 years.
c. Be recognized when the asset is resold to outsider parties at the end of its period of use.
d. Be recognized in the year of sale.

TOA 5-31 (AICPA)

Port, Inc. owns 100% of Salem, Inc. On January 1, 2019, Port sold Salem delivery equipment at a gain. Port had owned the equipment for 2 years and used a 5-year straight line depreciation rate with no residual value. Salem is using a 3-year straight line depreciation rate with no residual value for the equipment. In the consolidated income statement, Salem's recorded depreciation expense on the equipment for 2019 will be decreased by

a. 20% of the gain on sale.
b. 33 1/3% of the gain on sale.
c. 50% of the gain on sale.
d. 100% of the gain on sale.

TOA 5-32 (AICPA)

Shep Co. has a receivable from its parent, Pep Co. Should this receivable be separately reported in Shep's balance sheet and in Pep's consolidated balance sheet?

	Shep's Balance Sheet	Pep's Consolidated Balance Sheet
a.	Yes	No
b.	Yes	Yes
c.	No	No
d.	No	Yes

TOA 5-33 (IFRS)

Which of the following terms best describes the financial statements of a parent in which the investments are accounted for on the basis of the direct equity interest?

a. Single financial statements
b. Combined financial statements
c. Separate financial statements
d. Consolidated financial statements

TOA 5-34 (AICPA)

According to IAS 27 as amended in 2014, in the separate financial statements of a parent entity, investments in subsidiaries that are not classified as held–for-sale should be accounted for

a. At cost.
b. In accordance with IFRS 9.
c. At cost, or in accordance with IFRS 9, or equity method.
d. Using the equity method.

TOA 5-35 (AICPA)

A company has finalized the deferred tax calculation on October 1, 2020 in relation to its acquisition of a subsidiary on October 1, 2020. The adjustment required will

a. Be adjusted through income.
b. Be ignored as it too long since the acquisition.
c. Be adjusted through equity.
d. Affect the calculation of goodwill.

TOA 5-36 (Adapted)

A parent company owns 80% of its subsidiary. During the current year, the parent purchases an additional 10% interest from minority shareholders. Would this cash transaction appear in the following sections of the consolidated statement of cash flows?

	Operating	Investing	Financing	No Adjustment
a.	Yes	No	No	No
b.	No	Yes	No	No
c.	No	No	Yes	No
d.	No	No	No	Yes

TOA 5-37 (Adapted)

According to IFRS/PFRS for SMEs, a subsidiary is

a. Excluded from consolidation because the investor is a venture capital organization.
b. Not excluded from consolidation simply because the investor is a venture capital organization.
c. Excluded from consolidation because its business activities are dissimilar from those of other entities within the group.
d. Not excluded from consolidation simply because the investor only has significant influence, and not control, over it.

TOA 5-38 (Adapted)

According to IFRS/PFRS for SMEs, control exists when the parent owns half or less than half of the voting power of an entity when

a. No other entity owns more than half either.
b. There is power to govern the financial and operating policies of the entity under a statute.
c. There is power to govern the financial and operating policies of the entity under an agreement.
d. There is power to govern the financial and operating policies of the entity under a statute and there is power to govern the financial and operating policies of the entity under an agreement.

TOA 5-39 (Adapted)

According to IFRS/PFRS for SMEs, in determining control, potential voting rights:

a. Include those rights embedded in such instruments as share call option and share warrants.
b. Which are currently exercisable should be taken into account.

c. Even if they are not currently exercisable should be taken into account.
d. Include those rights embedded in such instruments as share call options and share warrants and which are currently exercisable.

TOA 5-40 (SME)

According to IFRS/PFRS for SMEs, a subsidiary shall be excluded from consolidation when

a. The investor is a venture capital organization, mutual fund, unit trust or similar entity.
b. The business activities of the subsidiary are dissimilar from those of the other entities within the group.
c. There is evidence that control is intended to be temporary because the subsidiary is acquired with the intention to dispose of it within twelve months from the date of acquisition.
d. The subsidiary is operating under severe long-term restrictions that significantly impair its ability to transfer funds to the parent.

TOA 5-41 (SME)

According to IFRS/PFRS for SMEs, the term "control" means ownership, directly or indirectly through subsidiaries of

a. More than one-half of the outstanding voting stock of another company.
b. At least 20% of the voting stock of another company.
c. At least 50% of the voting stock of another company.
d. At least 10% of the voting stock of another company.

TOA 5-42 (SME)

It is an entity created to accomplish a narrow objective, for example effect a lease, undertake research and development activities or securitize financial assets.

a. Special purpose entity
b. Joint controlled entity
c. Unincorporated entity
d. Combined entity

TOA 5-43 (SME)

An SME shall account for investments in subsidiaries, associates and jointly controlled entities in the separate financial statements

a. At cost less impairment.
b. At fair value with changes in fair value recognized in profit or loss.
c. Either at cost less impairment or at fair value with changes in fair value recognized in profit or loss.
d. Either at cost less impairment, fair value with changes in fair value recognized in profit or loss, or using the equity method.

TOA 5-44 (SME)

A subsidiary shall be excluded from consolidation when

a. The investor is a venture capital organization or similar entity.
b. The business activities of the subsidiary are dissimilar to those of the other entities within the consolidation.
c. The subsidiary is acquired and is held with the intention of selling or disposing of it within one year from its acquisition date.
d. The subsidiary operates in a jurisdiction that imposes restrictions on transferring cash or other assets out of the jurisdictions.

MULTIPLE CHOICE – Problems

PROB. 5-1 (RPCPA)

The condensed balance sheet as of December 31, 2019 of Rain Corporation and Sun Corporation are:

	Rain Corp.	Sun Corp.
Current assets	350,000	150,000
Noncurrent assets	550,000	350,000
Total assets	900,000	500,000
Liabilities	250,000	100,000
Capital stock, common P20 par	400,000	250,000
Retained earnings	250,000	150,000
Total liabilities & stockholders' equity	900,000	500,000

On January 1, 2020, Rain Corp. issued 20,000 shares of its common stock in exchange of all the outstanding stocks of Sun Corp. Rain Corp. common stock has market value of P30 per share. The combination qualifies as a purchase. After the combination, investment in Sun Corp. stock in the balance sheet of Rain Corp. is:

a. 400,000
b. 600,000
c. 250,000
d. 500,000

PROB. 5-2 (AICPA)

On December 31, 2020, Saxe Corp. was merged into Poe Corp. In the business combination, Poe issued 200,000 shares of its P10 par common stock, with a market price of P18 per share, for all of Saxe's common stock. The stockholders' equity section of each company's balance sheet immediately before the combination was:

	Poe	Saxe
Common stock	3,000,000	1,500,000
Additional paid in capital	1,300,000	150,000
Retained earnings	2,500,000	850,000
	6,800,000	2,500,000

Assume that the merger qualifies for treatment as a purchase. In the December 31, 2019, consolidated balance sheet, additional paid in capital should be reported at

a. 950,000
b. 1,300,000
c. 1,450,000
d. 2,900,000

PROB. 5-3 (Adapted)

On January 2, 2020, Parent Co. acquired all the outstanding common stock of Subsidiary Co. for P2,060,000. On that date, Subsidiary Co. reported the following stockholders' equity account balances: Common Stock P800,000, Additional Paid in Capital P620,000, Retained Earnings P300,000.

The assets and liabilities of Subsidiary Co. had book values that were approximately equal to its market values, except building that was undervalued by P400,000, and equipment that was overvalued by P120,000. The building has an estimated life of 20 years and equipment with 5 years useful life. Prior to acquisition, Subsidiary Co. has unimpaired goodwill in the amount of P10,000. What is the amount of goodwill to be reported in the consolidated balance sheet at the date of acquisition?

a. 40,000
b. 50,000
c. 60,000
d. 70,000

PROB. 5-4 (RPCPA)

The following summarized balance sheets were prepared for Alan Co. and Ritz Co. on December 31, 2020 prior to their combinations:

	Alan Co.	Ritz Co.
Assets:		
Current assets	60,000	3,600
Equipment (net)	10,000	3.400
Building (net)	50,000	5,000
Total assets	120,000	12,000
Liabilities and Stockholders' equity:		
Current liabilities	11,200	1,600
Mortgage payable	30,000	5,000
Common stock, P10 par value	10,000	1,000
Additional paid in capital	36,000	2,400
Retained earnings	32,800	2,000
Total liabilities & stockholders' equity	120,000	12,000

The fair market value of the building of Ritz Co. was P10,000.

Assuming that Alan Co. pays P15,000 cash in order to acquire 100% of the common stock of Ritz Co., what will be the amount of goodwill that would be shown on the consolidated balance sheet?

a. 4,600
b. 9,600
c. 5,000
d. Answer not given

PROB. 5-5 (AICPA)

On November 30, 2020, Parlor, Inc. purchased for cash at P15 per share all 250,000 shares of the outstanding common stock of Shaw Co. At November 30, 2020, Shaw's balance sheet showed a carrying amount of net assets of P3,000,000. At that date, the fair value of Shaw's property, plant and equipment exceeded its carrying amount by P400,000. In its November 30, 2020, consolidated balance sheet, what amount should Parlor report as goodwill?

a. 750,000
b. 400,000
c. 350,000
d. 0

PROB. 5-6 (AICPA)

On January 1, 2020, Owen Corp. purchased all of Sharp Corp.'s common stock for P1,200,000. On that date, the fair values of Sharp's assets and liabilities equaled their carrying amounts of P1,320,000 and P320,000, respectively. During 2020, Sharp paid cash dividends of P20,000. Selected information for the separate balance sheets and income statements of Owen and Sharp as of December 31, 2020, and for the year then ended follows:

	Owen	Sharp
Balance Sheet Accounts:		
Investment in subsidiary	1,300,000	
Retained earnings	1,240,000	560,000
Total stockholders' equity	2,620,000	1,120,000
Income Statement Accounts:		
Operating income	420,000	200,000
Equity in earnings of Sharp	120,000	
Net income	400,000	140,000

a. In Owen's 2020 consolidated income statement, what amount should be reported for amortization of goodwill?

a. 0
b. 12,000
c. 18,000
d. 20,000

b. In Owen's December 31, 2020 consolidated balance sheet, what amount should be reported as total retained earnings?

a. 1,240,000
b. 1,360,000
c. 1,380,000
d. 1,800,000

PROB. 5-7 (Adapted)

The PAS Co. acquired 70% of the net assets of the SFAS Co. for P1,100,000. The assets of the SFAS Co. have a book value of P1,200,000 and a fair market value of P1,300,000; its liabilities are P200,000.

What is the amount of minority interests in the stockholders' equity section of the consolidated balance sheet?

a. 300,000
b. 330,000
c. 360,000
d. 390,000

PROB. 5-8 (AICPA)

Sun, Inc. is a wholly-owned subsidiary of Patton, Inc. On June 1, 2020, Patton declared and paid a P1 per share cash dividend to stockholders of record on May 15, 2020. On May 1, 2020, Sun bought 10,000 shares of Patton's common stock for P700,000 on the open market, when the book value per share was P30. What amount of gain should Patton report from this transaction in its consolidated income statement for the year ended December 31, 2020?

a. 0
b. 390,000
c. 400,000
d. 410,000

PROB. 5-9 (Adapted)

Acquirer Co. purchased 75% of Taken Co. for P45,000,000. The fair value of identifiable net assets was P95,000,000 and the fair value of the liabilities and contingent liabilities amounted to P47,000,000. What would be the amount of goodwill associated to non-controlling interests of Taken Co.?

a. 3,000,000
b. 9,000,000
c. 12,000,000
d. (3,000,000)

PROB. 5-10 (Adapted)

Parson Co. acquired 80% of the outstanding common stock of Smith Co. for P1,500,000 cash on January 2, 2020, when the stockholders' equity of Smith Co. totaled P1,400,000 (common stock, P500,000; additional paid in capital, P600,000; retained earnings, P300,000). The book values of assets and liabilities approximate with its market values, except building that was undervalued by

P400,000, and equipment that was overvalued by P120,000. The building has an estimated useful life of 20 years and the equipment is expected to be useful for 5 years. Prior to acquisition, Smith Co. has unimpaired goodwill in the amount of P10,000. Assuming the non-controlling interest is measured at its share of the subsidiary's net assets, what is the amount of goodwill to be reported in the consolidated balance sheet at the date of acquisition?

a. 100,000
b. 156,000
c. 380,000
d. 604,000

PROB. 5-11 (IFRS)

The Elf Co. acquired a 60% interest in the Pea Co. when Pea's equity comprised share capital of P100,000 and retained earnings of P150,000.

Pea's current statement of financial position shows share capital of P100,000, a revaluation reserve of P75,000 and retained earnings of P300,000. Under IFRS 10, Consolidated Financial Statements, what amount in respect of the non-controlling interest should be included in Elf Co.'s consolidated statement of financial position?

a. 150,000
b. 160,000
c. 190,000
d. 90,000

PROB. 5-12 (Adapted)

Boss Co. owns 85% of the issued capital of Swine Co. During the period ended December 31, 2019, the operating profit of Swine was P680,000. Boss bought goods for P540,000 from Swine. The goods cost Swine P400,000 and at the end of the period none of this inventory was still on hand. Swine paid Boss a management fee of P100,000 during the period. Goodwill on consolidation was impaired by P30,000. Swine paid dividend of P40,000 at the end of the period. What is the non-controlling interest in the operating profit of Swine Co.?

a. 87,000
b. 112,500
c. 102,000
d. 101,969

PROB. 5-13 (Author)

On January 1, 2020, Entity A acquired 70% of outstanding ordinary shares of Entity B at a price of P210,000. On the same date, the net assets of Entity B is reported at P260,000. On January 1, 2020 Entity A reported retained earnings of P2,000,000 while Entity B reported retained earnings of P200,000.

All the assets and liabilities of Entity B are fairly valued except machinery which is undervalued by P80,000 and inventory which is overvalued by P10,000. The said machinery has remaining useful life of four years while 40% of the said inventory remained unsold at the end of 2020.

For the year ended December 31, 2020, Entity A reported net income of P1,000,000 and declared dividends of P200,000 in its separate financial statements while Entity B reported net income of P150,000 and declared dividends of P20,000 in its separate financial statements.

Entity A accounted its investment in Entity B using cost method in its separate financial statements.

1. What is the noncontrolling interest in net income for the year ended December 31, 2020?
   a. 39,000
   b. 40,800
   c. 42,000
   d. 40,200

2. What is the noncontrolling interest in net assets on December 31, 2020?
   a. 124,800
   b. 130,200
   c. 126,000
   d. 133,800

3. What is the consolidated net income attributable to parent's shareholders for the year ended December 31, 2020?
   a. 1,102,200
   b. 1,162,200
   c. 1,141,200
   d. 1,095,200

4. What is the consolidated retained earnings on December 31, 2020?
   a. 3,012,200
   b. 2,991,200
   c. 2,952,200
   d. 2,945,200

PROB. 5-14 (IFRS)

The Mars Co. holds a 70% interest in the Homer Co. At the current year end Mars holds inventory purchased from Homer for P270,000 at cost plus 20%. The group's consolidated statement of financial position has been drafted without any adjustments in relation to this holding inventory.

Under IFRS 10, Consolidated Financial Statements, what adjustment should be made to the draft consolidated statement of financial position figures for non-controlling interest and retained earnings?

	Non-controlling Interest	Retained Earnings
a.	No change	Reduce by P45,000
b.	No change	Reduce by P54,000
c.	Reduce by P16,200	Reduce by P37,800
d.	Reduce by P13,500	Reduce by P31,500

PROB. 5-15 (IFRS)

The Knight Co. acquired an 80% interest in the Pot Co. when Pot's equity comprised share capital of P100,000 and retained earnings of P500,000. Pot's current statement of financial position shows share capital of P100,000, a revaluation reserve of P400,000 and retained earnings of P1,400,000. Under IFRS 10, Consolidated Financial Statements, what figure in respect of Pot's retained earnings should be included in the consolidated statement of financial position?

   a. 720,000
   b. 1,440,000
   c. 1,040,000
   d. 1,520,000

PROB. 5-16 (AASB)

On August 1, 2020, Parent Co. acquired a 70% interest in Subways Co. At that date, the equity section of Subways' statement of financial position revealed the following:

Issued capital	P 5,000,000
General reserve	1,000,000
Retained earnings	500,000
Owner's equity	P 6,500,000

At acquisition date, Subways revalued its non-current assets to fair value with an increase of P2,000,000, net of tax) Parent Co. determined that it had paid P1,000,000 for goodwill. Any non-controlling interest is measured at the proportionate share of the fair value of the identifiable net assets of Subways. Which of the following pro-forma entries would be processed in the consolidation worksheet for the year ended December 31, 2020?

a.	Issued capital	3,500,000	
	General reserve	700,000	
	Retained earnings, beginning	350,000	
	Asset revaluation reserve	1,400,000	
	Goodwill	1,000,000	
	Investment in Subways Co.		6,950,000
b.	Issued capital	5,000,000	
	General reserve	1,000,000	
	Retained earnings, beginning	500,000	
	Goodwill	1,000,000	
	Investment in Subways Co.		7,500,000
c.	Issued capital	3,500,000	
	General reserve	700,000	
	Retained earnings, beginning	350,000	
	Goodwill	1,000,000	
	Investment in Subways Co.		5,550,000
d.	Issued capital	5,000,000	
	General reserve	1,000,000	
	Retained earnings, beginning	500,000	
	Asset revaluation reserve	2,000,000	
	Goodwill	1,000,000	
	Investment in Subways Co.		9,500,000

PROB. 5-17 (Adapted)

On January 1, 2020, Hills Co. purchased 80% of the issued share capital of Wells and has control of Wells. The fair value of the net assets of Wells on that date was represented as follows:

Share capital	2,000,000
Retained earnings	500,000
Total	2,500,000

Hills paid cash consideration of P2,500,000 for Wells. Wells made an operating profit of P350,000, there were no intragroup transactions during the period ended December 31, 2020. What consolidation journal entries are required for the period and what is the non-controlling interest in equity as of December 31, 2020?

a. Consolidation journal entries:

Share capital	1,600,000	
Retained earnings	400,000	
Goodwill	500,000	
Investment in Wells co.		2,500,000

Non-controlling interest:

Operating profit	70,000
Opening retained earnings	100,000
Share capital	400,000
Total	570,000

b. Consolidation journal entries:

Share capital	2,000,000	
Retained earnings	500,000	
Investment in Wells Co.		2,500,000

Non-controlling interest:

Retained earnings	100,000
Share capital	400,000
Total	500,000

c. Consolidation journal entries:

Share capital	1,600,000	
Retained earnings	400,000	
Goodwill	500,000	
Investment in Wells Co.		2,500,00
Non-controlling interest:		
Operating profit	65,000	
Opening retained earnings	100,000	
Share capital	400,000	
Total	565,000	

d. Consolidation journal entries:

Share capital	1,600,000	
Retained earnings	400,000	
Goodwill	500,000	
Investment in Wells Co.		2,500,00
Non-controlling interest:		
Operating profit	68,750	
Opening retained earnings	100,000	
Goodwill	125,000	
Share capital	400,000	
Total	693,750	

PROB. 5-18 (Adapted)

The journal entries to eliminate unrealized profit in closing inventory at December 31, 2019 were as follows:

December 31, 2019:	Debit	Credit
Cost of goods sold	500,000	
Inventory		500,000

What are the journal entries to eliminate the unrealized profit in opening inventory in the following period?

January 1, 2020:

a. Cost of goods sold	500,000	
Inventory		500,000

January 1, 2020:

b.	Inventory	500,000	
	Cost of goods sold		500,000

January 1, 2020:

c.	Retained earnings, beginning	500,000	
	Inventory		500,000

January 1, 2020:

d.	Retained earnings, beginning	500,000	
	Cost of goods sold		500,000

PROB. 5-19 (Adapted)

A non-current asset was sold by Sub Co. to Par Co. during 2019. The carrying amount of the asset at the time of the sale was P700,000. As part of the consolidation process, the following journal entry was passed:

December 31, 2019:

Profit on sale of asset	200,000	
Asset	300,000	
Accumulated depreciation		500,000

Assuming there is another ten years of useful life remaining for the asset, what are the journal entries at December 31, 2020 to adjust for depreciation?

December 31, 2019:

a.	Accumulated depreciation	40,000	
	Depreciation		40,000

December 31, 2019:

b.	Accumulated depreciation	30,000	
	Depreciation		30,000

December 31, 2019:

c.	Accumulated depreciation	60,000	
	Depreciation		30,000
	Retained earnings, beginning		30,000

December 31, 2019:

d.	Accumulated depreciation	40,000	
	Depreciation		20,000
	Retained earnings		20,000

PROB. 5-20 (AASB)

On January 1, 2020, Prime Co. acquired control of a subsidiary via an 80% shareholding. On December 31, 2020, the subsidiary declared a dividend of P100,000. Prime Co. accounted for dividends on an accrual basis. Prime Co. treated the dividend as tax-free. Which of the following pro-forma entries would be prepared in the consolidation worksheet for the year ended December 31, 2020?

a.	Deferred tax asset	30,000	
	Dividend income	100,000	
	Dividends payable	100,000	
	Income tax expense		30,000
	Retained earnings		100,000
	Dividends receivable		100,000
b.	Dividend income	100,000	
	Dividends payable	100,000	
	Retained earnings		100,000
	Dividends receivable		100,000
c.	Deferred tax asset	24,000	
	Dividend income	80,000	
	Dividends payable	80,000	
	Tax expense		24,000
	Retained earning		80,000
	Dividends receivable		80,000
d.	Dividend income	80,000	
	Dividends payable	80,000	
	Retained earnings		80,000
	Dividends receivable		80,000

PROB. 5- 21 (AICPA)

Poe, Inc. acquired 100% of Shaw Co. in a business combination on September 30, 2020. During 2020, Poe declared quarterly dividends of P25,000 and Shaw declared quarterly dividends of P10,000. Under the acquisition method of accounting for the business combination, what amount should be reported as dividends declared in the December 31, 2020 consolidated statement of retained earnings?

a. 100,000
b. 105,000
c. 130,000
d. 140,000

PROB. 5-22 (AICPA)

On January 2, 2020, Pare Co. purchased 75% of Kidd Co.'s outstanding common stock. Selected balance sheet data at December 31, 2020 is as follows:

	Pare	Kidd
Total assets	420,000	180,000
Liabilities	120,000	60,000
Common stock	100,000	50,000
Retained earnings	200,000	70,000
	420,000	180,000

During 2020, Pare and Kidd paid cash dividends of P25,000 and 5,000, respectively, to their stockholders. There were no other intercompany transactions.

a. In its December 31, 2020 consolidated statement of retained earnings, what amount should Pare report as dividend paid?
   a. 5,000
   b. 25,000
   c. 26,250
   d. 30,000

b. In Pare's December 31, 2020 consolidated balance sheet, what amount should be reported as minority interest in net assets?
   a. 0
   b. 30,000
   c. 45,000
   d. 105,000

c. In its December 31, 2020 consolidated balance sheet, what amount should Pare report as common stock?
   a. 50,000
   b. 100,000
   c. 137,500
   d. 150,000

PROB. 5-23 (AICPA)

	Manila, Inc.	Consolidated
Current assets	106,000	146,000
Plant assets (net)	270,000	370,000
Investment in A Co. (cost)	100,000	
Goodwill		8,100
Total	476,000	524,100
Current liabilities	15,000	28,000
Minority interest		35,100
Capital stock	350,000	350,000
Retained earnings	111,000	111,000
Total	476,000	524,100

Manila, Inc. acquired 70% of the outstanding stocks of A Co. The separate balance sheet of Manila, Inc. immediately after the business combination and the consolidated balance sheet are shown above. P10,000 of the excess payment for the investment in A Co. was ascribed to undervaluation of the plant assets, excess payment ascribed to goodwill. Current asset of A Co. which include a P2,000 receivable from Manila, Inc. which arose before the business combination. What is the total current asset of A Co.'s separate balance sheet at the time of Manila, Inc.'s acquisition of 70% interest?

a. 38,000
b. 40,000
c. 42,000
d. 104,000

PROB. 5- 24 (AICPA)

Wright Corp. has several subsidiaries that are included in its consolidated financial statements. In its December 31, 2019 trial balance, Wright had the following intercompany balances before eliminations:

	Debit	Credit
Current receivable due from Main Co.	32,000	
Noncurrent receivable from Main Co.	114,000	
Cash advance to Corn Corp.	6,000	
Cash advance from King Co.		15,000
Intercompany payable to King Co.		101,000

In its December 31, 2019 consolidated balance sheet, what amount should Wright report as intercompany receivables?

a. 152,000
b. 146,000
c. 36,000
d. 0

PROB. 5-25 (AICPA)

Lion King Co. owns 60% of Tiger Co.'s common stock and 40% of Dragon Co.'s common stock. On December 31, 2020, Tiger owes Lion King P400,000 and Dragon owes Lion King P200,000 for cash advances. In preparing the consolidated balance sheet for 2020, what amount of advances should be eliminated?

a. 600,000
b. 400,000
c. 320,000
d. 200,000

PROB. 5-26 (IFRS)

The Chevy Co. owns 75% of the Holden Co. The following figures are from their separate financial statements:

- Chevy Co. Trade receivables P1,040,000, including P30,000 due from Holden.

- Holden Co. Trade receivables P215,000, including P40.000 due from Chevy.

According to IFRS 10, Consolidated Financial Statements, what figure should appear for trade receivables in Chevy's consolidated statement of financial position?

a. 1,215,000
b. 1,225,000
c. 1,255,000
d. 1,185,000

PROB. 5-27 (AICPA)

Pong Co. owns 70% of Simm Co.'s outstanding common stock. Pong's liabilities total P450,000, and Simm's liabilities total P200,000. Included in Simm's financial statements is a P100,000 note payable to Pong. What amount of total liabilities should be reported in the consolidated financial statements?

a. 520,000
b. 550,000
c. 590,000
d. 650,000

PROB. 5-28 (Adapted)

On January 2, 2019, Christian Co. acquired a 70% interest in Dior Corp. In 2020 Dior Corp. reported net income of P800,000; and in 2021, P900,000. In 2020, an upstream sale of merchandise between the affiliated companies occurred for P100,000 at a gross margin of 20%. In 2021, the merchandise was resold to outsiders for P150,000. What is the amount of the minority interest net income in 2020?

a. 246,000
b. 240,000
c. 234,000
d. 210,000

PROB. 5-29 (AICPA)

Parker Corp. owns 80% of Smith, Inc.'s common stock. During 2020, Parker sold Smith P250,000 of inventory on the same terms as sales made to third parties. Smith sold all of the inventory purchased from Parker in 2020. The following information pertains to Smith and Parker's sales for 2020.

	Parker	Smith
Sales	1,000,000	700,000
Cost of sales	400,000	350,000
	600,000	350,000

What amount should Parker report as cost of sales in its 2020 consolidated income statement?

a. 750,000
b. 680,000
c. 500,000
d. 430,000

PROB. 5-30 (Adapted)

What is the amount of unrealized profit that needs to be eliminated at the end of the period, in the following situation, where Moreland Co. is the parent of World Co.? (Ignore the tax effect.) Moreland purchases 500 units of inventory for P20 each. Moreland sells this entire inventory to World Co. at a mark-up of 25%. World then sells half of the inventory to an external party. Half of the remaining amount (after the external sale) is sold back to Moreland for P2,500.

a. 2,500
b. 300
c. 625
d. 1,250

PROB. 5-31 (AICPA)

Selected information from the separate and consolidated balance sheets and income statements of Pare, Inc. and its subsidiary, Shel Co. as of December 31, 2020, and for the year ended is as follows:

	Pare	Shel	Consolidated
Balance Sheet Accounts:			
Accounts receivable	52,000	38,000	78,000
Inventory	60,000	50,000	104,000
Income Statement Accounts:			
Revenues	400,000	280,000	616,000
Cost of goods sold	300,000	220,000	462,000
Gross profit	P100,000	P60,000	P 154,000

Additional information:

During 2020, Pare sold goods to Shel at the same markup on cost that Pare uses for all sales. In Pare's consolidated worksheet, what amount of unrealized intercompany profit was eliminated?

a. 6,000
b. 12,000
c. 58,000
d. 64,000

PROB. 5-32 (AICPA)

During 2020, Pard Corp. sold goods to its 80%-owned subsidiary, Seed Corp. At December 31, 2020, one-half of these goods were included in Seed's ending inventory. Reported 2020 selling expenses were P1,100,000 and P400,000 for Pard and Seed, respectively. Pard's selling expenses included P50,000 in freight out cost for goods sold to Seed. What amount of selling expenses should be reported in Pard's 2020 consolidated income statement?

a. 1,500,000
b. 1,480,000
c. 1,475,000
d. 1,450,000

PROB. 5-33 (RPCPA)

Roses Corp. acquired a 70% interest in Camia Co. in 2019. For the year ended December 31, 2019 and 2020, Camia Co. reported an income of P160,000 and P180,000, respectively. During 2019, Camia sold merchandise to Roses Corp. for

P20,000 at a profit of P4,000. The merchandise was later resold by Roses Corp. to outsiders for P30,000 during 2020. For consolidated purposes, what is the minority interest's share of Camia's net income for 2019 and 2020, respectively?

	2019	2020
a.	46,800	55,200
b.	48,000	54,000
c.	49,200	52,800
d.	53,200	50,000

PROB. 5-34 (AICPA)

On January 1, 2020, Poe Corp. sold a machine for P900,000 to Saxe Corp., its wholly-owned subsidiary. Poe paid P1,100,000 for this machine, which had accumulated depreciation of P250,000. Poe estimated a P100,000 salvage value and depreciated the machine on the straight line method over 20 years, a policy which Saxe continued. In Poe's December 31, 2020 consolidated balance sheet, this machine should be included in cost and accumulated depreciation as

	Cost	Accum. Depreciation
a.	1,100,000	300,000
b.	1,100,000	290,000
c.	900,000	40,000
d.	850,000	42,500

PROB. 5-35 (IFRS)

The Rodman Co. acquired equipment on January 1, 2015 at a cost of P800,000, depreciating it over 8 years with a nil salvage value. On January 1, 2018, the Mel Co. acquired 100% of Rodman and estimated the fair value of the equipment at P460,000, with a remaining life of 5 years. This fair value was not incorporated into Rodman's books and the depreciation expense continued to be calculated by reference to original cost. Under IFRS 10, Consolidated Financial Statements, what adjustment should be made to the depreciation expense for the year and the statement of financial position carrying amount in preparing the consolidated financial statements for the year ended December 31, 2019

	Depreciation Expense	Carrying Amount
a.	Increase by P8,000	Increase by P24,000
b.	Increase by P8,000	Decrease by P24,000
c.	Decrease by P8,000	Increase by P24,000
d.	Decrease by P8,000	Decrease by P24,000

PROB. 5-36 (IFRS)

The Snipe Co. owns 65% of the Genesis Co. On the last day of the accounting year Genesis sold to Snipe a non-current asset for P200,000. The asset originally cost P500,000 and at the end of the reporting period its carrying amount in Genesis' books was P160,000. The group's consolidated financial statement of financial position has been drafted without any adjustments in relation to this non-current asset. Under IFRS 10, Consolidated Financial Statements, what adjustments should be made to the consolidated statement of financial position figures for non-current assets and retained earnings?

	Non-current Assets	Retained Earnings
a.	Increase by P300,000	Increase by P195,000
b.	Reduce by P40,000	Reduce by P26,000
c.	Reduce by P40,000	Reduce by P40,000
d.	Increase by P300,000	Increase by P300,000

PROB. 5-37 (IFRS)

The Vince Co. owns 65% of the Mink Co. On December 31, 2020, the last day of the accounting period, Vince sold to Mink a non-current asset for P1,000,000. The asset's original cost was P2,500,000 and on December 31, 2020, its carrying amount in Vince's books was P800,000. The group's consolidated statement of financial position has been drafted without any adjustments in relation to this non-current asset. Under IFRS 10, Consolidated Financial Statements, what adjustments should be made to the consolidated statement of financial position figures for non-current assets and non-controlling interest?

	Non-current Assets	Non-controlling Interest
a.	Increase by P1,500,000	Increase by P525,000
b.	Reduce by P200,000	No change
c.	Reduce by P200,000	Reduce by P70,000
d.	Increase by P1,500,000	No change

PROB. 5-38 (AICPA)

Scroll, Inc., a wholly-owned subsidiary of Pirn, Inc. began operations on January 1, 2020. The following information is from the condensed 2020 income statements of Pirn and Scroll:

	Pirn	Scroll
Sales to Scroll	P 100,000	
Sales to others	400,000	P 300,000
	P 500,000	P 300,000
Cost of goods sold:		
Acquired from Pirn		80,000
Acquired from others	350,000	190,000
Gross profit	150,000	30,000
Depreciation	40,000	10,000
Other expenses	60,000	15,000
Income from operations	50,000	5,000
Gain on sale of equipment to Scroll	12,000	
Income before income taxes	P 62,000	P 5,000

Additional information:

- Sales by Pirn to Scroll are made on the same terms as those made to third parties.
- Equipment purchased by Scroll from Pirn for P36,000 on January 1, 2020 is depreciated using the straight line method over 4 years.

a. In Pirn's December 31, 2020 consolidating worksheet, how much intercompany profit should be eliminated from Scroll's inventory?
   a. 30,000
   b. 20,000
   c. 10,000
   d. 6,000

b. What amount should be reported as depreciation expense in Pirn's 2020 consolidated income statement?
   a. 50,000
   b. 47,000
   c. 44,000
   d. 41,000

PROB. 5-39 (Adapted)

A non-current asset was sold by Subsidiary Co. to Parent Co during 2020. The carrying amount of the asset at the time of the sale was P700,000. As part of the consolidation process, the following journal entry was passed:

December 31, 2020:		
Profit on sale of asset	200,000	
Asset	300,000	
Accumulated depreciation		500,000

What (a.) amount did Parent Co. pay Subsidiary Co. for the asset and (b.) was the cost of the asset as shown in the books of Subsidiary Co.?

a.	(a.) 900,000	(b.) 1,400,000
b.	(a.) 900,000	(b.) 1,200,000
c.	(a.) 700,000	(b.) 1,200,000
d.	(a.) 900,000	(b.) 800,000

PROB. 5-40 (Author)

On January 1, 2019, Entity A acquires 60% of outstanding ordinary shares of Entity B at a gain on bargain purchase of P40,000. For the year ended December 31, 2020, Entity A and Entity B reported sales revenue of P2,000,000 and P1,000,000 in their respective separate income statements. At the same year, Entity A and Entity B reported cost of sales of P1,200,000 and P700,000 in their respective separate income statements.

During 2019, Entity A sold inventory to Entity B at a selling price of P280,000 with gross profit rate of 40% based on cost. On the other hand, Entity B sold inventory to Entity A at a selling price of P400,000 with gross profit rate of 30% based on sales during 2020.

On December 31, 2019, ¼ of the goods coming from Entity A remained in Entity B's inventory but all were eventually sold to third persons during 2020. As of December 31, 2020, 2/5 of the goods coming from Entity B were eventually sold to third persons.

For the year ended December 31, 2020, Entity A reported net income of P500,000 while Entity B reported net income of P200,000 and distributed dividends of P50,000. Entity A accounted for its inventory in Entity B using cost method in its separate financial statements.

1. What is the consolidated sales revenue for the year ended December 31, 2020?
   a. 2,600,000
   b. 2,320,000
   c. 3,000,000
   d. 2,720,000

2. What is the consolidated gross profit for the year ended December 31, 2020?
   a. 1,120,000
   b. 1,048,000
   c. 1.028,000
   d. 1,152,000

3. What is the noncontrolling interest in net income for the year ended December 31, 2020?
   a. 88,000
   b. 59,200
   c. 51,200
   d. 100,800

PROB. 5-41 (Author)

On January 1, 2019, Entity A acquires 80% of outstanding ordinary shares of Entity B at a gain on bargain purchase of P180,000. The following intercompany transactions occurred for between the two entities:

- On January 1, 2019, Entity B sold a land to Entity A with a cost of P1,000,000 at a selling price of P1,100,000. The land was eventually sold by Entity A to third person during 2020.

- On January 1, 2019, Entity A sold a white machinery to Entity B with a cost of P200,000 and accumulated depreciation of P40,000 at a selling price of P180,000. The machinery is already 4 years old at the date of sale. The residual value of white machinery is immaterial.

- On July 1, 2020, Entity B sold a black machinery to Entity A at with a cost of P270,000 and accumulated depreciation of P180,000 at a selling price of P60,000. The machinery is already 6 years old at the date of sale. The residual value of black machinery is immaterial.

For the year ended December 31, 2020, Entity A reported net income of P800,000 while Entity B reported net income of P500,000 and distributed dividends of P150,000. Entity A accounted for its inventory in Entity B using cost method in its separate financial statements.

1. What is the consolidated depreciation expense of machinery for the year ended December 31, 2020?
   a. 40,000
   b. 55,000
   c. 61,667
   d. 42,333

2. What is the consolidated book value of machinery on December 31, 2020?
   a. 225,000
   b. 215,000
   c. 200,000
   d. 210,000

3. What is the noncontrolling interest in net income for the year ended December 31, 2020?
   a. 124,000
   b. 105,000
   c. 125,000
   d. 104,000

PROB. 5-42 (AICPA)

Company P owns 100% of the common stock of Company S. Company P is constructing an asset for Company S that will used in Company S manufacturing operations over 5-year period. The asset was 50% complete at the end of 2017 and was completed on December 31, 2018. Company P is recording the construction under the percentage of completion method. The asset was put in use by Company S on January 1, 2020. The profit on the asset was estimated to be P50,000. Actual results complied to estimate. What amount of profit will appear on the consolidated statements?

	2017	2018	2019	2020
a.	0	50,000	0	0
b.	25,000	25,000	0	0
c.	0	0	10,000	10,000
d.	0	0	50,000	0

PROB. 5-43 (Adapted)

At January 1, Seacoast Co., an 80% owned subsidiary of Plantation Corp., had P1,000,000 face value of 14% bonds outstanding. They had been issued at face value. Market conditions at January 1 provided a 10% yield rate when Plantation purchased these bonds in the open market for P1,100,000. Which of the following amounts should be included in a consolidated income statement for the year?

a. Bond interest expense of P140,000.
b. Bond interest revenue of P110,000.
c. Ordinary loss of P100,000.
d. Ordinary loss of P80,000.

PROB. 5-44 (RPCPA)

Madonna Co. has a 75% interest in Jemo, Inc., which is recorded on a cost basis. For the fiscal year ended June 30, 2020, the following data were taken from the respective books: Net income of Madonna Co. was P125,000 while net income of Jemo, Inc. was P45,000. There was an intercompany interest on bonds in the amount of P5,700. Jemo, Inc. declared and paid dividend in the amount of P9,000. The consolidated net income for the fiscal year was:

a. 158,975
b. 147,725
c. 163,250
d. 152,000

PROB. 5-45 (AICPA)

Wagner, a holder of a P1,000,000 Palmer, Inc. bond, collected the interest due on March 31, 2020, and then sold the bond to Seal, Inc. for P975,000. On that date, Palmer, a 75% owner of Seal, had a P1,075,000 carrying amount for this bond.

What was the effect of Seal's purchase of Palmer's bond on the retained earnings and minority interest amounts reported in Palmer's March 31, 2020 consolidated balance sheet?

	Retained earnings	Minority interest
a.	100,000 increase	0
b.	75,000 increase	25,000 increase
c.	0	25,000 increase
d.	0	100,000 increase

PROB. 5-46 (AICPA)

Parks Co. owns 80% of Swing Co. On January 1, 2020, Swing Co. has outstanding 6% bonds with a face value of P200,000 and an unamortized discount of P3,000, which is being amortized on a straight line basis over a remaining term of 10 years. On January 1, 2020, Parks Co. purchased all the bonds for P205,000. The premium is also amortized on a straight line basis. The net impact of the purchase on the minority interest as of December 31, 2020 is

a. 1,440
b. 1,200
c. 8,000
d. 500

PROB. 5-47 (Adapted)

Hart Co. purchased the net assets of Larry Co. for P700,000. The net assets of Larry were recorded as follows on the acquisition date:

Cash	70,000
Inventory	120,000
Land	100,000
Building (net)	350,000
Liabilities	(140,000)
Net assets	500,000

The market values were as follows: inventory, P130,000; Land P120,000; Building, P400,000.

What is the amount that will appear as cash applied to investing activities in the statement of cash flows as a result of this purchase?

a. 700,000
b. 630,000
c. 840,000
d. 640,000

PROB. 5-48 (Adapted)

Arlington acquired 75% of the outstanding common stock of the Web Co. by issuing common stock with market value of P650,000 on January 2, 2020. At that date, the balance sheet of Arlington was as follows:

Cash	90,000
Inventory	100,000
Land	150,000
Building (net)	500,000
Total assets	840,000
Liabilities	100,000
Common stock, P10 par	100,000
Additional paid in capital	200,000
Retained earnings	440,000
Total liabilities and stockholders' equity	840,000

The market values were as follows: Inventory P180,000; Land, P150,000; Building, P600,000. What is the amount that will appear as cash – financing activities in the statement of cash flows as a result of this purchase?

a. 0
b. 100,000
c. 840,000
d. 630,000

PROB. 5-49 (Adapted)

Suwannee Co. issued 20,000 additional shares of its common stock for P1,600,000. Suwannee Co.'s owners' equity section immediately before and immediately after this issuance of stock transaction are presented below:

	Before	After
Capital stock, P10 par value	1,000,000	1,200,000
Additional paid in capital	2,500,000	3,900,000
Retained earnings	3,900,000	3,900,000
Total owners' equity	7,400,000	9,000,000

a. Assume that Suwannee Co. issued this stock to the general public. By what amount should Palatka Corp., the owner of 80,000 of the outstanding shares of Suwannee Co. adjust its investment in subsidiary account because of the issuance of stock by Suwannee Co.?

a. 0
b. 80,000 debit
c. 80,000 credit
d. 1,280,000 debit

b. Assume that Suwannee Co. issued the stock to Palatka Corp., whose ownership interest thereby increased from 80,000 shares to 100,000 shares. If the carrying value of the identifiable assets of Suwannee is equal to their fair value at the time the additional shares are issued, the goodwill indicated in the purchase of the additional shares equals

a. 0
b. 20,000
c. 320,000
d. 1,580,000

PROB. 5-50 (AASB)

On July 1, 2020, Holden Co. purchase all the issued capital of Sports Co. for P40,000,000. At acquisition date, the equity section of the statement of financial position of Sports Co. contained the following accounts:

Issued capital	P20,000,000
Retained earnings	11,000,000
Owner's equity	P31,000,000

In addition, Holden Co. decided that Sports Co. had equipment with fair value of P6,000,000, which was disclosed in the statement of financial position at a cost of P8,000,000 and accumulated depreciation of P4,000,000. The equipment was depreciated at 20 % of cost by Sports Co. and the same policy was adopted by the

group for the purpose of preparing consolidated financial statements. The revaluation of the equipment resulted to temporary difference when the tax based of the equipment remains unchanged. The tax rate is 30%.

Which of the following consolidation adjusting entries would be prepared if the consolidated financial statements were prepared at acquisition date?

a.	Issued capital	20,000,000	
	Retained earnings	11,000,000	
	Deferred tax asset	600,000	
	Accumulated depreciation	4,000,000	
	Goodwill	6,400,000	
	Equipment		2,000,000
	Investment in Sports Co.		40,000,000
b.	Issued capital	20,000,000	
	Retained earnings	11,000,000	
	Accumulated depreciation	4,000,000	
	Goodwill	7,600,000	
	Equipment		2,000,000
	Deferred tax liability		600,000
	Investment in Sports Co.		40,000,000
c.	Issued capital	20,000,000	
	Retained earnings	11,000,000	
	Accumulated depreciation	4,000,000	
	Goodwill	7,000,000	
	Equipment		2,000,000
	Investment in Sports Co.		40,000,000
d.	Issued capital	20,000,000	
	Retained earnings	11,000,000	
	Goodwill	9,000,000	
	Investment in Sports Co.		40,000,000

PROB. 5-51 (Author)

On January 1, 2020, Entity A acquired 90% of outstanding ordinary shares of Entity B at a price of P900,000. Entity A paid P20,000 costs related to acquisition of shares. At the acquisition date, the net assets of Entity B is reported at P950,000. All the assets of Entity B are properly valued except for a

machinery which is undervalued by P150,000. The machinery has a remaining useful life of 5 years.

For the year ended December 31, 2020, Entity B reported net income of P200,000 and declared dividends in the amount of P30,000. Based on the data given by the qualified appraiser, the fair value of Investment in Entity B on December 31, 2020 is P1,000,000 while the cost to sell is 5%.

Entity A voluntarily prepares its separate financial statements.

1. If Entity A elects cost method to account its Investment in Entity B in its separate financial statements, what is the book value of the Investment in Entity B on December 31, 2020?
   a. 900,000
   b. 920,000
   c. 1,000,000
   d. 950,000

2. What is the net effect in profit or loss for year 2020 if Entity A elects cost method to account its Investment in Entity B in its separate financial statements?
   a. 7,000 net profit
   b. 27,000 net profit
   c. 180,000 net profit
   d. 107,000 net profit

3. If Entity A elects fair value model at profit or loss to account its Investment in Entity B in its separate financial statements, what is the book value of the Investment in Entity B on December 31, 2020?
   a. 900,000
   b. 920,000
   c. 1,000,000
   d. 950,000

4. What is the net effect in profit or loss for year 2020 if Entity A elects fair value model through profit or loss to account its Investment in Entity B in its separate financial statements?
   a. 7,000 net profit
   b. 27,000 net profit
   c. 180,000 net profit
   d. 107,000 net profit

5. If Entity A elects equity method to account its Investment in Entity B in its separate financial statements, what is the book value of the Investment in Entity B on December 31, 2020?
   a. 1,116,000
   b. 950,000
   c. 1,000,000
   d. 920,000

6. What is the net effect in profit or loss for year 2020 if Entity A elects equity method to account its Investment in Entity B in its separate financial statements?
   a. 57,000 net profit
   b. 27,000 net profit
   c. 180,000 net profit
   d. 107,000 net profit

PROB. 5-52 (Adapted)

Redford Corp. has a 90% interest in White Co.; while the latter has an 80% interest in Sol Corp. For the year ended December 31, 2020, the net income from own operations of these three companies were: Redford Corp., P1,000,000; White Corp., P500,000, Sol Corp.; P250,000. What is the amount of minority interest in net income for 2020?

a. 120,000
b. 100,000
c. 70,000
d. 50,000

PROB. 5 -53 (Adapted)

On July 1, 2020, Double Co. acquired 80% of the share capital of Solo Co. for P800,000, which represented the fair value of the consideration paid, when the share capital and reserves of Solo Co. were:

Issued capital	P 600,000
Revaluation surplus	200,000
Retained earnings	200,000
Owner's equity	P 1,000,000

All assets of Solo Co. were recorded at fair value at acquisition date, except for equipment that had a fair value of P40,000 greater than its carrying amount. This gives rise to the recognition of deferred tax liability. The cost of the equipment was P80,000 and it had accumulated depreciation of P20,000. The tax rate is 30%.

Using the partial goodwill method, what is the amount of fair value adjustment and goodwill, respectively, only July 1, 2020 for non-controlling interests in Solo Co.?

a.	5,600	Zero
b.	22,400	44,400
c.	5,600	44,400
d.	22,400	177,600

PROB. 5-54 (Adapted)

On July 1, 2020, Double Co. acquired 80% of the share capital of Solo Co. for P1,000,000, which represented the fair value of the consideration paid, when the share capital and reserves of Solo Co. were:

Issued capital	P 600,000
Revaluation surplus	200,000
Retained earnings	200,000
Owner's equity	P 1,000,000

All assets of Solo Co. were recorded at fair value at acquisition date, except for equipment that had a fair value of P40,000 greater than its carrying amount. This gives rise to the recognition of deferred tax liability. The cost of the equipment was P80,000 and it had accumulated depreciation of P20,000. The tax rate is 30%

Using the full goodwill method, what is the amount of fair value adjustment and goodwill, respectively, on July 1, 2020 for non-controlling interests in Solo Co.?

a.	5,600	Zero
b.	22,400	Zero
c.	5,600	44,400
d.	22,400	177,600

ANSWERS – Theory of Accounts

TOA 5-1 *Suggested answer (d) Economic entity*

Consolidated financial statements should reflect the economic activities of an entity measured without regard to the boundaries of legal entity. Accounting information pertains to an entity. For instance, a parent and subsidiary are legally separated but are treated as a single entity in consolidated statements.

TOA 5-2 *Suggested answer (c) The acquiring firm owns 100% of the voting stock of the acquired firm.*

In a legal acquisition, the acquiring firm does not have to own 100% of the voting stock of the acquired firm in order to have controlling interest. An ownership of more than half of the acquired firm is sufficient to have control. Both firms continue to exist and operate as separate legal entities, the acquiring firm as the parent and the acquired firm as a subsidiary.

TOA 5-3 *Suggested answer (a)*

Consolidated financial statements are prepared on the basis that the group is a single economic entity, by aggregating the transactions and balances of the parent and all its subsidiaries. ***A group is simply a collection of entities, where one, the parent, controls the activities of the others, its subsidiaries.***

TOA 5-4 *Suggested answer (b)*

According to IFRS 10, Consolidated Financial Statements, an investor controls an investee if and only if the investor has all of the following elements:

1. *Power over the investee, i.e., the investor has existing rights that give it the ability to direct the relevant activities (the activities that significantly affect the investee's returns).*
2. *Exposure, or rights, to variable returns from its involvement with the investee.*
3. ***The ability to use its power over the investee to affect the amount of the investor's returns.***

TOA 5-5 *Suggested answer (c)The investor must have existing rights that give it the current liability to direct relevant activities,*

Power arises from rights. To have power over an investee, an investor must have existing rights that give the investor the current ability to direct the relevant activities. The rights that may give an investor power can differ between investee. (par B14, IFRS 10)

TOA 5-6 *Suggested answer (b) Parent*

Parent is an entity that controls the activities of the others, its subsidiaries.

TOA 5-7 *Suggested answer (b) It is a sale of an investment at a gain or loss*

A parent company may sell a portion of its investment in a subsidiary but still have an interest that exceeds 50% after the sale. According to the parent company concept, which focuses on only the position of the controlling interest, the sale of a portion of an interest in a subsidiary should be viewed as producing a gain or loss to be reported on the income statement.

TOA 5-8 *Suggested answer (b)*

Increasing the number of shares held by party/parties other than the parent will lead to a situation where the parent loses control of a subsidiary, ***except where bonus shares were issued on a pro-rata basis where everybody maintained their shares proportionate with one another.***

TOA 5-9 *Suggested answer (c) The subsidiary should not be consolidated but PFRS 5 should be used.*

Again, a subsidiary is excluded from consolidation when control is temporary because the subsidiary is acquired and held with a view to its disposal within 12 months from acquisition. Under this circumstance, the investment is classified as held for sale and accounted under PFRS 5.

TOA 5-10 *Suggested answer (b)*

Consolidated financial statements should be prepared by the parent (Fantasy), and not by the subsidiary (Snow White). *The parent has an investment and*

control of the subsidiary, which is the basis for preparing consolidated financial statements. The subsidiary does not have an investment or control of the parent; thus, there is no basis for the subsidiary to prepare consolidated financial statements.

TOA 5-11 *Suggested answer(c) Inventories*

A business combination may result in a parent-subsidiary relationship in which the acquirer is the parent and the acquiree, a subsidiary of the acquirer. In such circumstances, the acquirer applies PFRS 3 in its consolidated financial statements, e.g., recognizing the acquiree's identifiable assets, liabilities, and contingent liabilities at fair values at the date of acquisition. Thus, the excess of market value over the book value of the inventory is treated as inventory in order to bring the inventory at its market value.

TOA 5-12 *Suggested answer (b)*

Under acquisition (purchase) method, all assets and liabilities of the acquiree should be reported at fair value, the excess of asset's (equipment) market value over its carrying amount is allocated to the asset and amortize over its useful life. ***The unamortized portion of the excess of the market value over the carrying amount of the asset is reported as part of the asset (equipment).***

TOA 5-13 *Suggested answer (b) Debit: Goodwill*

In a legal acquisition, where controlling interest is acquired, the acquirer shall record the acquisition by debiting only the Investment account and crediting whatever form/s of consideration given. Goodwill cannot be debited at the time of the acquisition, though it may be recognized at the time of consolidation.

TOA 5-14 *Suggested answer (b)*

When a parent-subsidiary relationship arises, the acquirer has purchased a single-asset, an investment in the subsidiary. This gives rise to the need to prepare the consolidated financial statements for the group of entities, which includes the parent and the subsidiary. ***For purposes of consolidation, working paper adjusting and elimination entries, including purchased goodwill, shall be prepared.***

TOA 5-15 *Suggested answer (a) Non-controlling interest*

The ownership of the profits and net assets of subsidiaries included in the aggregation process should be analyzed between the parent entity shareholders and the non-controlling interest. The non-controlling interest is the portion of the results and financial position of subsidiaries that does not belong to the parent. The portion of profit or loss and net assets of the group which belongs to the non-controlling interest should be presented separately in the consolidated financial statements.

TOA 5-16 *Suggested answer (a)*

IFRS 3, Business Combination, allows an accounting choice on an acquisition-by-acquisition basis, for any non-controlling interest in the acquiree to be measured either at:

- *Fair value; or*
- *The non-controlling interest's proportionate share of the acquiree's identifiable net assets.*

Where the non-controlling interest is measured using its proportionate share of the acquiree's net assets, only the acquirer's share of the goodwill is brought to account in the business combination. This accounting policy option does not measure the total goodwill and it excludes the component of goodwill that relates to the non-controlling interest. This is often referred to as "partial goodwill" method. ***Using this option, goodwill is usually calculated as the consideration paid less the fair value of the identifiable net assets acquired by the acquirer.***

TOA 5-17 *Suggested answer (d)*

The non-controlling interest is calculated by taking three elements into account, such as:

1. *Non-controlling interests' share in the net assets (equity) of the subsidiary at the dates the parent entity acquired the subsidiary.*
2. *Non-controlling interests' share in the changes in equity since acquisition date.*
3. *Non-controlling interests' share in the profit or loss of the subsidiary in the current period. At the end of the reporting period, the non-controlling interests' share in the profit or loss of the subsidiary for the year,*

distribution and transfers made, and movements in reserves for the year must be determined.

Furthermore, IFRS 10, *Consolidated Financial Statements, requires the elimination of the effect of all intragroup transactions before the consolidated financial statements are presented, which holds whether or not there are non-controlling interests.* ***After adjusting the operating profit and opening retained earnings, the share of the non-controlling interest may now be determined based on the non-controlling interest percentage ownership.***

TOA 5-18 *Suggested answer (b)*

The consolidation adjustment entry, in relation to dividend declared or paid by subsidiary, will only eliminate the dividend paid or payable within the group to the parent. ***The proportion of dividend paid or payable by subsidiary to the non-controlling interest shareholders will not be eliminated because a party external to the group is involved;*** *thus (b) is incorrect.*

TOA 5-19 *Suggested answer (d) The payment of a management fee by the subsidiary to the parent and the sale of inventory by the parent to the subsidiary.*

Some intra-group transactions involve eliminating revenue and expense items but have no impact on group profit or loss. Example of which is when services like management services are provided within the group, the provider of that services recognizes revenue while the entity receiving the services records an expense. From the group's perspective, the revenue and expense items cancel each other and there is no impact on profit or loss, and considered as realized. As a result, the realization of profit or loss on consolidation is not an issue.

However, some intra-group transactions, such as sale of inventory or non-current assets, involve eliminating profits or losses recorded in the parent or subsidiary because they are unrealized from the group's perspective. As non-controlling interests have an interest in the group through the subsidiary, only the intra-group transactions that affect the subsidiary's equity requires adjustment. This adjusted subsidiary figure then serves as the basis of calculation for the non-controlling interests. It is important to note that if the parent is the seller in the intra-group transaction, no adjustments are required to the subsidiary equity account balances to enable the non-controlling interests to be calculated.

TOA 5-20 *Suggested answer (b) Adjustment must be made on consolidation to remove the effects of the different policies.*

Paragraph B87. IFRS 10, provides if a member of the group uses accounting policies other than those adopted in the consolidated financial statements for like transactions and events in similar circumstances, appropriate adjustment are made to that group member's financial statements in preparing the consolidated financial statements to ensure conformity with the group's accounting policies.

TOA 5-21 *Suggested answer (a)*

Given that all of the goods were sold, no adjustment is necessary for intercompany profit in ending inventory. Accordingly, the parent's cost should be included in consolidated cost of goods sold, and the price received by the subsidiary should be included in consolidated sales. The required adjustment is ***to eliminate the sale recorded by the parent and the cost of goods sold recorded by the subsidiary.***

TOA 5-22 *Suggested answer (c)*

Typically, inventory acquired in intercompany sales as recorded by the buying affiliate includes profits or losses. However, if no such goods remain in ending inventory, no overstatement or understatement on inventory will occur.

Elimination should also be made to ***intercompany sales and the related cost of goods sold*** *recorded by the selling affiliate, in order to avoid overstatement of these accounts. Finally,* ***intercompany receivables and payables*** *are also eliminated for consolidation purposes.*

TOA 5-23 *Suggested answer (a) Investment in Subsidiaries*

As discussed in the preceding problems, for purposes of consolidation, the carrying value of the parent's investment in its subsidiary was eliminated along with the shareholder's equity of the subsidiary; thus, not shown in the consolidated statement of financial position or notes thereto.

TOA 5-24 *Suggested answer (d) Parent's share of the subsidiary's equity*

Again, as discussed in the preceding problems, for purposes of consolidation, the carrying value of the parent's investment in its subsidiary was eliminated along with the shareholder's equity of the subsidiary.

TOA 5-25 *Suggested answer (d)Transactions between two subsidiaries to be consolidated with the same parent do not need to be eliminated.*

Intercompany transactions (i.e., transactions between affiliated firms) must be eliminated regardless of whether the transactions are between the parent and its subsidiaries or between two subsidiaries of the same parent. The consolidated financial statements must reflect accounts and amounts as if intercompany transactions never occurred.

TOA 5-26 *Suggested answer (c) Goodwill*

In a legal acquisition, goodwill is not recognized at the date of acquisition when the parent company records its legal acquisition, though it may be recognized at the time of consolidation. Goodwill will result when the parent paid more for its investment in a subsidiary than the fair value of identifiable net assets acquired. Moreover, goodwill does not occur as a result of operating period transaction between a parent and its subsidiary.

TOA 5-27 *Suggested answer (c) Goodwill*

Goodwill may be recognized by the entry that eliminates the parent's investment in the subsidiary against the parent's share of the subsidiary's stockholders' equity, but goodwill will not be eliminated through an eliminating entry.

TOA 5-28 *Suggested answer (a) 90% 0%*

The dividends declared by a subsidiary are not considered part of consolidated dividends. Those are eliminated in the consolidation entries. In this situation, the 80% dividends of the subsidiary will be eliminated as intragroup transaction and the remaining 20% will be allocated to the non-controlling interest. While, the

10% dividends of Palace are not considered dividends of the consolidated entity, because they never go outside the consolidated entity.

TOA 5-29 *Suggested answer (d) Spread over 10 years*

Since fixed assets are not intended for sale in the ordinary course of business, the realization of any intercompany profit on sale of depreciable asset is when the buying affiliate use this asset. Profit from sale is spread over the useful life of the depreciable asset by reducing the recorded depreciation.

TOA 5-30 *Suggested answer (b) Be recognized over 5 years.*

Intercompany profits on inventory is realized when it is sold to unaffiliated party, because inventories are intended for sale in the ordinary course of business. As to depreciable assets, realization of intercompany gain or loss is when this amount is used. This approach also enables to restate the asset, the related accumulated depreciation, and depreciation expense to the amounts that would appear in the consolidated financial statements, if there had been no intercompany sales.

TOA 5-31 *Suggested answer (b)* 33 1/3% of the gain on sale

The effects of intercompany transactions should be eliminated. Consequently, the equipment and the related depreciation expense should be reported at amounts that exclude the gain on sale to Salem. Given that the equipment was held by Port for 2 of its 5 years of estimated useful life, that it has no salvage value, and that Salem is depreciating it over 3 years, which is the same period Salem should recognize the gain on sale by reducing the depreciation expense. Thus, 33 1/3% of the gain is included in the 2019 depreciation expense recorded on the equipment and should be eliminated.

TOA 5-32 *Suggested answer (a) Yes, No*

In a consolidated balance sheet, reciprocal balances, such as receivables and payables, between a parent and consolidated subsidiary should be eliminated in their entirety regardless of the portion of the subsidiary's stock held by the

parent. However, intercompany transactions should not be eliminated from the separate financial statements of the entities.

TOA 5-33 *Suggested answer (c) Separate financial statements*

Separate financial statements are those presented by a parent in which the investments are accounted for on the basis of the direct equity interest rather than on the basis of the reported results and net assets of the subsidiary.

TOA 5-34 *Suggested answer (c) At cost or in accordance with IFRS 9 or equity method.*

IAS 27, Separate Financial Statements (2011), provides that when an entity prepares separate financial statements, it shall account for investments in subsidiaries, joint ventures and associates either: (effective for annual periods beginning on or after January 1, 2013)

- *At cost, or*
- *In accordance with IFRS 9, Financial Instruments (or IAS 39, Financial Instruments: Recognition and Measurement for entities that have not yet adopted IFRS 9)*

However, on August 12, 2014, IASB changes IAS 27 to again allow application of the equity method in separate financial statements, effective for annual reporting beginning on or after January 1, 2016. The amendment allows an entity to account for investment in subsidiary, joint ventures and associates in its separate financial statement, as follows:

- *At cost, or*
- *In accordance with IFRS 9, Financial Instruments (or IAS 39, Financial instruments: Recognition and Measurement for entities that have not yet adopted IFRS 9), or*
- *Using the equity method as described in IAS 28, Investment in Associates and Joint Ventures.*

TOA 5-35 *Suggested answer (d) Affect the calculation of goodwill.*

IAS 12, Income Taxes, paragraphs 19 and 66, provides that recognizing deferred tax assets and deferred tax liabilities in a business combination affects the amount

of goodwill or gain from bargain purchase. When the fair value of the identifiable net assets will increase due to revaluation, deferred tax asset is recognized. On the other hand, when the fair value will decrease, deferred tax liability is recognized. This affects the goodwill or gain from bargain purchase, which is the difference between the acquisition cost and the fair value of the identifiable net assets acquired.

TOA 5-36 *Suggested answer (c) No, No, Yes, No*

The purchase of additional shares directly from the subsidiary results in no added cash flowing into the consolidated firm. The transfer of cash within the consolidated firm would not appear in the consolidated statement of cash flows. However, the purchase of additional shares from the minority group does result in an outflow of cash. From a consolidated viewpoint, it is equivalent to purchasing treasury shares. Thus, it would be listed under financing activities.

TOA 5-37 *Suggested answer (b)Not excluded from consolidation simply because the investor is a venture capital organization*

IFRS/PFRS for SMEs provides that a subsidiary is not excluded from consolidation because:

1. *Investor is a venture capital organization.*
2. *Subsidiary's business activities are dissimilar to those of parent or other subsidiaries.*
3. *Subsidiary operates in a jurisdiction that imposes restrictions on transferring cash or other assets out of jurisdictions.*

TOA 5-38 *Suggested answer (d)*

IFRS/PFRS for SMEs Section 9, par. 9.5 states that control also exists when the parent owns half or less of the voting power of an entity but it has:

1. *Power over more than half of the voting rights by virtue of an agreement with other investors;*
2. ***Power to govern the financial and operating policies of the entity under a statute or an agreement;***
3. *Power to appoint or remove the majority of the members of the board of directors or equivalent governing body and control of the entity is by that board or body; or*

4. *Power to cast the majority of votes at meeting of the board of directors or equivalent governing body and control of the entity is by that board or body.*

TOA 5-39 *Suggested answer (d) Include those rights embedded in such instruments as share call options and share warrants and which are currently exercisable.*

Per IFRS/PFRS for SME, Section 9, par 9.6, control can also be achieved by having options or convertible instruments that are currently exercisable or by having an agent with the ability to direct the activities for the benefit of the controlling entity.

TOA 5-40 *Suggested answer (c)*

A subsidiary is excluded from consolidation ***when control is temporary because the subsidiary is acquired and held with a view to its disposal within 12 months from acquisition.*** *Under this circumstance, the investment is classified as held for sale and accounted under PFRS 5.*

TOA 5-41 *Suggested answer (a)*

According to IFRS/PFRS for SMES, Section 9, control is usually obtained where one entity ***owns more than half of voting rights****, although it is possible to have control in other circumstances.*

TOA 5-42 *Suggested answer (a)*

IFRS/PFRS for SMEs, Section 9, par 9.10 states a ***special purpose entity is an entity created to accomplish a narrow objective****, for example effect a lease, undertake research and development activities or securitize financial assets. Such an entity may take the form of a corporation, trust, partnership or unincorporated entity.*

TOA 5-43 *Suggested answer (d)*

Per amendment (2015) to Section 9, Consolidated and Separate Financial Statement, par 9.26 the entity shall adopt a policy of accounting for its investment in subsidiaries, associates and jointly controlled entities in its separate financial statements ***either:***

1. *At* ***cost less impairment,***
2. *At* ***fair value with changes in fair value recognized in profit or loss,*** *or*
3. *Using the* ***equity method*** *following procedures in par 14.8.*

TOA 5-44 *Suggested answer (c)*

Per amendment (2015) to Section 9, Consolidated and Separate Financial Statements, par 9.3(a) a subsidiary is not consolidated ***if it is acquired and is held with the intention of selling or disposing of it within one year from its acquisition date.*** *Such subsidiary is accounted for in accordance with the requirements in section 11 as for investment in par 11.8(d) rather than in accordance with this section.*

SOLUTIONS - Problems

PROB. 5-1 *Suggested answer (b) P600,000*

Investment in Sun Corp. (20,000 x 30)	600,000

Again, in case of issuance of securities as consideration, the principles for recording the purchase are not changed; only the recording of the consideration differs. The market value of the securities issued becomes the total consideration to be assigned to the acquired firm.

PROB. 5-2 *Suggested answer (d) P2,900,000*

Additional paid in capital of Poe Corp.	1,300,000
Excess of market price of stock issued over its par value [(18 - 10) x 200,000]	1,600,000
Consolidated additional paid in capital under purchase	2,900,000

In a business combination accounted for as a purchase, the fair market value of the net assets is used as the valuation basis for the combination. When items other than cash are involved, it is important to recognize the current value of the items exchanged in determining the total purchase price. As a general rule, in the issuance of capital stock, the amount of the investment representing the legal capital is reported as capital stock; and the remaining balance (excess over par or stated value) is recognized as additional paid in capital.

PROB. 5-3 *Suggested answer (c) 60,000*

Acquisition cost		2,060,000
Less Book value of interest acquired:		
Common stock	800,000	
Additional paid in capital	620,000	
Retained earnings	300,000	1,720,000
Excess of cost over book value		340,000
Allocate excess:		
Undervalued building	(400,000)	
Overvalued equipment	120,000	(280,000)
Goodwill		60,000

Goodwill is recognized only when the net assets of acquired company are stated at its full market value. Accordingly, under PFRS 3, goodwill is no longer amortized but tested for impairment.

PROB. 5-4 *Suggested answer (a) 4,600*

Acquisition cost		15,000
Market value of the net asset acquired:		
Current assets	3,600	
Equipment (net)	3,400	
Building (net)	10,000	
Current liabilities	(1,600)	
Mortgage payable	(5,000)	10,400
Goodwill		4,600

Again, goodwill is the excess of cost over the market value of the net assets of the subsidiary acquired by the parent. In order words, goodwill is recognized when the net assets acquired are recorded at its full market value.

PROB. 5-5 *Suggested answer (c) 350,000*

Acquisition cost (250,000 x 15)		3,750,000
Less market value of net asset acquired:		
Recorded carrying amount	3,000,000	
Add excess of fair value of property, plant & equipment	400,000	3,400,000
Goodwill		350,000

Again, goodwill is recognized only when the net assets of acquired company are stated at its full market value. Accordingly, under PFRS 3, goodwill is no longer amortized but tested for impairment.

PROB. 5-6

a. *Suggested answer (a) 0*

Under PFRS 3, goodwill is no longer amortized but tested for impairment frequently.

b. *Suggested answer (a) 1,240,000*

Acquisition cost	1,200,000
Less market value of the net assets acquired (1,320,000 - 320.000)	1,000,000
Goodwill	200,000

This acquisition resulted to the recognition of goodwill, as shown above. The portion of the stockholders' equity of the subsidiary acquired by the parent is eliminated in the working paper for purposes of consolidation, thus, what remained in the consolidated balance sheet is the stockholders' equity of the parent included thereat is the retained earnings of P1,240,000.

PROB. 5-7 *Suggested answer (b) P330,000*

Net assets at fair value (1.300.000 – 200.000)	1,100,000
Multiply by minority interests percentage	30%
Minority interest net assets	330,000

PFRS 3 provides that because the acquirer recognizes the acquiree's identifiable assets, liabilities, and contingent liabilities at their fair values at the acquisition date. any minority interest in the acquiree is stated at the minority proportion of the net fair value of those items. The minority interest in net assets (MINA) shall be presented in the consolidated balance sheet within equity, separate from the parent shareholders' equity.

PROB. 5-8 *Suggested answer* (a) P 0

As a general rule, no income or revenue will emerge in any capital stock transactions. Any excess over its par or stated value should be credited to additional paid in capital. Although it's quite clear that the question is "what amount of gain should Pat.on report....", the dividend received by Sun do not affect consolidated income, because such intercompany transaction are eliminated in the preparation of consolidated financial statements.

PROB. 5-9 *Suggested answer (a) 3,000,000*

Consideration paid	45,000,000
Add Non-controlling interest (45,000,000/75% x 25%)	15,000,000
Total	60,000,000
Less Fair value of net assets of Taken Co. (95,000,000 – 47,000,000)	48,000,000
Total goodwill	12,000,000
Parent's share from total goodwill (75% x 12,000,000)	9,000,000
Non-controlling interest share (25% x 12,000,000)	3,000,000
Total goodwill	12,000,000

IFRS 3, Business Combination, provides that non-controlling interest in the acquiree to be measured either: at fair value, which is often referred to as the full goodwill; or the non-controlling interest's proportionate share of the acquiree's identifiable net assets, which is sometimes referred to as partial goodwill. In the above computation of goodwill, the full goodwill method was used, which is composed of the parent's share and the non-controlling interest's share. Alternatively, if the partial goodwill method, parent's share only, will be used, the following computations will be as follows:

Consideration paid	45,000,000
Add Non-controlling interest (95,000,000 – 47,000,000 x 25%)	12,000,000
Total	57,000,000
Less Fair value of net assets of Taken Co. (95,000,000 – 47,000,000)	48,000,000
Goodwill (partial)	9,000,000
Non-controlling interest's share (9,000,000/75% x 25%)	3,000,000

PROB. 5-10 *Suggested answer (b) 156,000*

Acquisition cost		1,500,000
Less book value of interest acquired:		
Common stock (500,000 x 80%)	400,000	
Additional paid in capital (600,000 x 80%)	480,000	
Retained earnings (300,000 x 80%)	240,000	1,120,000

Excess of cost over book value		380,000
Allocate excess:		
Undervalued building	(400,000)	
Overvalued equipment	120,000	
Total	(280,000)	
Less minority interest (20% x 280,000)	56,000	(224,000)
Goodwill		156,000

Under PFRS 3. Business Combination,at the date of acquisition, the acquirer shall measure the acquiree's identifiable assets and liabilities at their fair value. In addition to the identifiable net assets acquired, the acquirer should recognize any non-controlling interest in the acquiree at either fair value or at the non-controlling interest's proportionate share of the acquiree's identifiable net assets. When the non-controlling interest is measured at its proportionate share of the acquiree's identifiable net assets goodwill is not grossed up.

PROB. 5-11 *Suggested answer (c) 190,000*

Common stock, Pea Co.	100,000
Revaluation reserve, Pea Co.	75,000
Retained earnings, Pea Co.	300,000
Total stockholders' equity, Pea Co.	475,000
Multiply by minority interest percentage	40%
Minority interest net assets	190,000

The portion of the net assets of the group which belongs to the non-controlling interest should be presented within the equity section of the consolidated financial position.

PROB. 5-12 *Suggested answer (c)102,000*

Non-controlling interest in the operating profit (680.000 x 15%)	102,000

For purposes of consolidation, the effects of the intragroup transactions are eliminated, because these are unrealized from the group's perspective. However, in this case, the profit from intragroup sale of inventory was realized when all were sold to external party. The management fee paid by the subsidiary to parent

has no impact on the group profit or loss, because the provider entity recognizes revenue while the entity receiving the services records an expense. Therefore, the operating profit reported by the subsidiary is presumed to the correct amount and includes all profit and loss items regularly recorded in its books.

PROB. 5-13

1. *Suggested answer: (b) 40,800*

Net income reported by Entity B in its separate statement	150,000
Less amortization of undervaluation of machinery (80,000/4 years)	20,000
Balance	130,000
Add amortization of overvaluation of inventory (10,000 x 60%)	6,000
Adjusted net income of Entity B	136,000
Multiply by noncontrolling interest percentage	30%
Noncontrolling interest in net income for 2020	40,8000

2. *Suggested answer: (d) 133,800*

Initial measurement of noncontrolling interest in net assets [(260,000 +80,000 - 10,000) x 30%]	99,000
Add noncontrolling interest in net income	40,800
Total	139,800
Less NCI share in dividend declared by Entity B (20,000 x 30%)	6,000
Noncontrolling interest in net assets, December 31, 2020	133,800

3. *Suggested answer: (a) 1,102,200*

Net income reported by Entity A in its separate statement		1,000,000
Add: Gain on bargain purchase (210,000 + 99,000 – 330,000)	21,000	
Share in adjusted net income of Entity B (136,000 x 70%)	95,200	116,200
Total		1,116,200
Less dividend income from Entity B (20,000 x 70%)		14,000
Consolidated net income attributable to parent		1,102,200

4. *Suggested answer: (c) 2.952,200*

Retained earnings of Entity A, January 1, 2020	2,000,000
Add consolidated net income attributable to parent	1,102,200
Total	3,102,200
Less dividend declared by Entity B during 2020	150,000
Consolidated retained earnings, December 31, 2020	2,952,200

PROB. 5-14 *Suggested answer (d) Reduce by P13,500 Reduce by P31,500*

Unrealized profit in ending inventory (minority share) (270,000 x 20%/120% x 30%)	13,500
Unrealized profit in ending inventory (majority share) (270,000 x 20%/120% x 70%)	31,500

When goods are sold between group entities and they are still held by one of the entities at the year-end, any element of profit created by these internal transactions is considered to be unearned as far as the single economic entity is concerned and should therefore be eliminated. The inventories themselves should be reduced to their original cost to the group. The full amounts of such transactions and balances arising within a group should be eliminated even if the seller is a subsidiary in which there is a non-controlling interest.

PROB. 5-15 *Suggested answer (a) 720,000*

Pot Co.'s retained earnings at the date of acquisition	500,000
Less Pot's retained earnings at year end	1,400,000
Pot Co.'s net income for the period	900,000
Multiplied by the majority percentage	80%
Knight's share in Pot's net income	720,000

The amount of the subsidiary's retained earnings in the consolidated statement of financial position is the parent's share of the post acquisition retained earnings of the subsidiary.

PROB. 5-16 *Suggested answer (a),*

According to paragraph B86(b), IFRS 10, the carrying amount of the parent's investment in the subsidiary must be eliminated along with the parent's portion of equity of the subsidiary. Note that any non-controlling interest is measured at the proportionate share of the fair value of the identifiable net assets of Subways, therefore, it is only the parent's share of the goodwill (P1,000,000) which is brought to account in the business combination. In other words, it does not measure the total goodwill and it excludes the component of goodwill that relates to the non-controlling interest. The calculation to reflect the elimination entry follows:

Issued capital (5,000,000 x 70%)	3,500,000
General reserve (1,000,000 x 70%)	700,000
Retained earnings, beginning (500,000 x 70%)	350,000
Asset revaluation reserve (2,000,000 x 70%)	1,400,000
Owner's equity	5,950,000
Goodwill	1,000,000
Carrying amount of investment in Subways Co.	6,950,000

PROB. 5-17 *Suggested answer (a)*

Consolidation journal entries:		
Share capital (2,000,000 x 80%)	1,600,000	
Retained earnings (500,000 x 80%)	400,000	
Goodwill {2,500,000 – (2,500,000 x 80%)}	500,000	
Investment in Wells co.		2,500,000
Non-controlling interest:		
Operating profit (350,000 x 20%)	70,000	
Opening retained earnings (500,000 x 20%)	100,000	
Share capital (2,000,000 x 20%)	400,000	
Total	570,000	

Again, as discussed in the preceding problems, for purposes of consolidation, the carrying value of the parent's investment in its subsidiary was eliminated along with the shareholder's equity of the subsidiary. And any goodwill that may arise is recorded as a consolidation adjusting entry.

The holders of the non-controlling interests have an entitlement to share in the net assets and profit or loss of the subsidiary and their share is determined by their percentage ownership of the share.

PROB. 5-18 *Suggested answer (d)*

In the consolidated statement of profit or loss, the sale and cost of goods sold that did not result from a transaction with external parties will be eliminated. Therefore, in this case, the unrealized profit in opening inventory will be recorded as ***reduction from the opening/beginning retained earnings and cost of goods sold.***

PROB. 5-19 *Suggested answer (d)*

Accounting for intragroup sale of depreciable asset requires elimination of unrealized profit or loss. The profit or loss would be recognized when the asset involving the profit or loss is either sold to a party external to the group or when the group consumes the future economic benefits of the asset. If used as depreciable asset by the purchaser within the group, the profit or loss is recognized consistent with the depreciation allocation of asset; that is by reducing the depreciation expense for the current period. Note that eliminating intragroup transactions is achieved through an adjusting entry in the consolidated worksheet. This may be required in the ensuing accounting periods to eliminate any account balances still affected.

Given in this case a profit of P200,000 with remaining useful life of ten year, realization of profit per year should be P20,000 (200,000/10). Since 2020 is the second year of its operations, 2019 is considered as prior year. Therefore, to recognize profit from this sale, ***P20,000 shall be credited to retained earnings*** *for prior year, and another* ***P20,000 shall be credited to depreciation*** *for the current period.*

PROB. 5-20 *Suggested answer (d)*

Again, IFRS 10, Consolidated Financial Statements, provides where one entity controls another entity, this gives rise to a parent-subsidiary relationship and

establishes a group for financial reporting purposes. Therefore, the consolidation adjustment entry in relation to dividend declared or paid by the subsidiary will ***only eliminate the dividend paid or payable within the group to the parent.*** *The proportion of dividend paid or payable by the subsidiary to the non-controlling interest shareholders will not be eliminated because a party external to the group is involved.* ***Elimination of intragroup dividend is limited on the parent's share.***

PROB. 5-21 *Suggested answer (a) 100,000*

Purchase method:	
2020 dividend, Poe, Inc. (25,000 x 4)	100,000

IFRS 10, Consolidated Financial Statements, requires that for purposes of consolidated, intra-group balances and transactions, including income, expenses and dividends are eliminated in full. Specifically, the dividend income account is eliminated against the dividend declared by the subsidiary.

PROB. 5-22

a. *Suggested answer (b) P25,000*

For consolidation purposes, elimination entries, subsequent to date of acquisition includes elimination of intercompany dividends and the minority share of dividends. Thus, what is to be reported in the consolidated statements is the dividends declared and paid by the parent.

b. *Suggested answer (b) P30,000*

Common stock, 12/31/2019	50,000
Retained earnings, 12/31/2019	70,000
Total stockholders' equity, 12/31/2019	120,000
Multiply by minority interest percentage	25%
Minority interest, 12/31/2019	30,000

PFRS 3, Business Combination, requires the acquirer's identifiable assets, liabilities and contingent liabilities recognized as part of allocating the cost of the combination to be measured initially by the acquirer at their fair values at the acquisition date. Thus, any minority interest in the acquiree is stated at the minority proportion of the net fair values of those items.

c. Suggested answer (b) P100,000

Consolidation procedures consider the elimination of the stockholders' equity of the subsidiary, thus the consolidated paid-in capital is of the parent only.

PROB. 5-23 *Suggested answer: (c) P42,000*

Consolidated current assets	146,000
Less Manila, Inc. current assets	106,000
A Co.'s current asset after consolidation	40,000
Add eliminated receivable from Manila, Inc.	2,000
Total current asset of A Co. - date of acquisition	42,000

The preparation of the consolidated balance sheet generally requires the elimination of other items in addition to investment and reciprocal capital accounts. Transactions among affiliated companies frequently give rise to receivables on statements of others. When the parent and its subsidiaries are viewed as a single unit, the intercompany balances lose their significance and require elimination in the same manner as interbranch items. The entire amounts of reciprocal balances are eliminated only on the consolidated worksheet, even when a minority interest is present. Thus, the difference between the consolidated current assets and the current assets of Manila, Inc. was increased by the intercompany receivables that was eliminated to determine the current assets of A Co. at the date Manila, Inc. acquired its 70% interest.

PROB. 5-24 *Suggested answer* (d) P 0

Because the parent and its subsidiary are considered as one entity for consolidation purposes, any intercompany receivables and payables should be eliminated. Therefore, no amount of which should be reported in the consolidated balance sheet.

PROB. 5-25 *Suggested answer* (b) P400,000

IFRS 10, Consolidated Financial Statements, shall be applied in the preparation and presentation of consolidated financial statements for a group of entities under the control of a parent. Control is the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. Generally, an ownership of more than one-half of the voting rights by virtue of

an agreement with other investors represents control. Thus intercompany receivables and payables between a parent and controlled entity (60% interest in Tiger Co.) should be eliminated.

PROB. 5-26 *Suggested answer (d) 1,185,000*

Chevy's trade receivables excluding due from Holden (1,040,000 – 30,000)	1,010,000
Holden's trade receivables excluding due from Chevy (215,000 – 40,000)	175,000
Trade receivables in consolidated statement of financial position	1,185,000

For purposes of consolidation, intercompany receivables and payables are eliminated.

PROB. 5-27 *Suggested answer (b) 550,000*

Parent's total liabilities	450,000
Add Subsidiary's total liabilities	200,000
Total	650,000
Less Notes payable to Parent	100,000
Total liabilities in the consolidated financial statements	550,000

The consolidated financial statements should reflect 100% of the assets and liabilities of the subsidiary less any intercompany balances that should be eliminated.

PROB. 5-28 *Suggested answer* (c) P234,000

Dior's net income from own operations, 2020	800,000
Less unrealized profit in ending inventory (100,000 x 20%)	20,000
Dior's net income after elimination of unrealized intercompany profit	780,000
Multiply by minority interest percentage	30%
Minority interest net income for 2020	234,000

An intercompany sale normally involves a profit to the company making the sale. This profit is properly recognized in the books of the selling company. However, such a profit can be recognized in the consolidated financial statements only if the goods or properties have been resold to outsiders or consumed. If the asset is still held by the buying affiliate, the sale must be viewed as no more than a transfer between affiliates; any intercompany profit, together with the related increase in asset cost emerging from such transfer must be eliminated.

Because the elimination of the intercompany profit or loss may be allocated proportionately between the majority and minority interests, this will eventually reduce the subsidiary net income which is the basis in computing the minority interest net income for a given period.

PROB. 5-29 *Suggested answer* (c) P500,000

Parker's recorded cost of sales	400,000
Smith's recorded cost of sales	350,000
Total cost of sales	750,000
Less intercompany cost of sales	250,000
Consolidated cost of sales	500,000

When intercompany sales include profits or losses, the working paper eliminations for purposes of consolidation consider the income statement effects of the intercompany sale by removing the sales revenue and the related cost of goods sold recorded by the selling affiliate. In addition, the balance sheet is effected by overstated inventory due to unrealized profit or loss.

PROB. 5-30 *Suggested answer (c) 625*

Sales (500 x 20 x 125%)	12,500
Less cost (500 x 20)	10,000
Profit from sale	2,500
Multiply by remaining units	¼
Unrealized profit	625

Profits or losses arising from the intragroup sale of inventory should be eliminated because these are unrealized from the group's perspective. The group shall recognize these profits or losses when the inventories are sold to external party. Note that "half of the remaining amount" which is one-fourth of the total

intragroup sale is still within the group (sold back to Moreland), thus the unrealized profit is P625, as shown above.

PROB. 5-31 *Suggested answer* (a) P6,000

Total gross profit before consolidation (100,000 + 60,000)	160,000
Less consolidated gross profit	154,000
Unrealized gross profit	6,000

Again, for purposes of consolidation, unrealized profits and losses (e.g., intercompany profits and losses on inventories and property, plant and equipment) remaining within the group should be eliminated. Therefore, the consolidated statements showed the profit reported by the affiliated companies net of any unrealized profit.

PROB. 5-32 *Suggested answer* (d) P1,450,000

Total selling expenses recorded in 2020 (1,100,000 + 400,000)	1,500,000
Less freight out cost for goods sold to Seed	50,000
Consolidated selling expenses	1,450,000

The effect of intercompany transactions should be eliminated from consolidated financial statements at its entirety regardless of the parent's percentage of ownership. Accordingly, the freight cost of transporting the merchandise of the selling affiliate to the buying affiliate should not be treated as selling expenses, instead it is inventoriable because it is a cost directly associated with bringing the goods to a salable condition.

PROB. 5-33 *Suggested answer* (a) P46,800 P55,200

	2019	2020
Camia's income from own operations	160,000	180,000
Add (deduct) intercompany profit	(4,000)	4,000
Camia's adjusted income	156,000	184,000
Multiply by minority interest percentage	30%	30%
Minority interest share in Camia's income	46,800	55,200

When a company sells merchandise to an affiliate and the merchandise remains unsold, the profit or loss recorded by the selling affiliate is unrealized. This merchandise is expected to be sold to unaffiliated party in the next accounting period. Since the intercompany profit was recorded in the year of sale, in the subsequent year the inter company profit is added to the reported net income of the selling affiliate. The intercompany profit in an upstream sale is recognized by the subsidiary and shared between the parent and the minority interests.

PROB. 5-34 *Suggested answer* (a) P1,100,000 P300,000

Accumulated depreciation before the sale	250,000
Add depreciation after the sale (1,000,000/20)	50,000
Accumulated depreciation (consolidated)	300,000

Again, consistent with the objective of preparing the consolidated financial statement to restate the accounts as if the intercompany transactions had not occurred, the original cost of P1,100,000 should remain in the consolidated statements and the related accumulated depreciation should be continued.

Stated differently, if the generally accepted accounting principles on monetary exchange will be followed, this machine will be recorded by the buying affiliate at its new cost of P900,000. In the consolidated working paper (elimination of unrealized profit on sale of asset), the cost of this asset will be restored to its original cost of P1,100,000. While the depreciation that will be recorded by the buying affiliate (based on its new cost) will be adjusted by the realization of gain on sale through reduction of depreciation expense, in conformity with the original depreciation recorded.

PROB. 5-35 *Suggested answer (d) Decrease by P8,000 Decrease by P24,000*

Rodman's depreciation at cost (800,000/8)	100,000
Less Mel's depreciation at fair value (460,000/5)	92,000
Decrease in depreciation	8,000

Carrying value at Rodman's books, 12/31/19		
Cost	800,000	
Less accumulated depreciation (2015-2019) (800,000/8 x 5)	500,000	300,000
Less carrying value at Mel's books, 12/31/19		
Fair value	460,000	
Less accumulated depreciation (2018-2019) (460,00/5 x 2)	184,000	276,000
Decrease in carrying value		24,000

Fair value adjustments not reflected in the books must be adjusted for purposes of consolidation. In other words, the carrying value and depreciation recorded in the consolidated financial statements shall be at fair values.

PROB. 5-36 *Suggested answer (b) Reduce by P40,000 Reduce by P26,000*

As the consolidated financial statements present the information for the group as a single entity, any transactions or balances arising between different entities in the group should be eliminated in full. Only the group share of the profits of the subsidiary are taken to group retained earnings; while the minority share shall be taken separately to the non-controlling interest in the stockholders equity. The corresponding profits/gains arising from the intercompany sales may be realized when the asset was sold to unaffiliated parties or when consumed. Note that in this case, the sale occurred at the last day of the accounting period, thus, no amount of the profit is realized.

By eliminating the unrealized profit on intercompany sale 40,000 (200,000 – 160,000), the non-current asset is restated to its original carrying amount of P160,000. Accordingly, the retained earnings will be reduced by 26,000 (40,000 x 65%) due to the parent's share; while the minority share shall reduce the non-controlling interest (MINA).

PROB. 5-37 *Suggested answer (b) Reduce by P200,000 No change*

Again, any profits/gains arising from intercompany sales may be realized when the asset was sold to unaffiliated parties or when consumed. Note that in this case, the sale occurred at the last day of the accounting period, thus no amount of the profit is realized. By eliminating the unrealized profit P200,000 (1,000,000

– 800,000), the non-current assets will be reduced, however, the elimination process will not affect the non-controlling interest considering the seller is the parent company.

PROB. 5-38

a. *Suggested answer (d) P6,000*

Unsold merchandise, 12/31/2020 (100,000 - 80,000)	20,000
Multiply by Pirn's gross profit rate (150,000/ 500,000)	30%
Unrealized profit on ending inventory	6,000

The complete elimination of the intercompany profits or loss is consistent with the underlying assumption that consolidated statements represent the financial position and operating results of a single business enterprise. The unrealized profit on ending inventory that should be eliminated represents the profit recognized by the seller to affiliated company. The profit is unrealized because the inventory has not yet been sold outside of the consolidated entity.

b. *Suggested answer (b) P47,000*

Pirn's recorded depreciation	40,000
Scroll's recorded depreciation	10,000
Realized profit on intercompany sale of equipment (12,000/ 4)	(3,000)
Depreciation expense in the consolidated income statement	47,000

The practices that are followed in eliminating the intercompany profits on inventories are also applicable in eliminating intercompany profits on other assets. On consolidated worksheets prepared in periods subsequent to year of sale, the intercompany profits identified with the asset decreases in proportion to the decrease taking place in the asset as a result of the recorded depreciation.

Stated differently, when computing consolidated income, the objective is to restate the accounts as if the intercompany transactions had not occurred. The buying affiliate is depreciating this asset at its acquisition cost of P36,000 instead of its book value of P24,000 (36,000 - 12,000). With an assumption as if the intercompany transactions had not occurred, for consolidation purposes, this should be depreciated based on its original cost

or book value. Therefore, the depreciation that was recorded by the buying affiliate is P9,000 (36,000/ 4) instead of P6,000 (24,000/ 4), resulting to overstatement of P3,000, and this amount should be eliminated for purposes of consolidation.

PROB. 5-39 *Suggested answer (b) 900,000 1,200,000*

Carrying value	700,000
Add profit	200,000
Selling price	900,000

Carrying value	700,000
Accumulated depreciation	500,000
Cost of the asset	1,200,000

PROB. 5-40

1. *Suggested answer: (a) 2,600,000*

Sales revenue reported by Entity A for 2020	2,000,000
Add sales revenue reported by Entity B for 2020	1,000,000
Total sales revenue reported	3,000,000
Less intercompany sales during 2020	400,000
Consolidated sales revenue for 2020	2,600,000

2. *Suggested answer: (b) 1,048,000*

Gross profit of Entity A for 2020 (2,000,000 – 1,200,000)		800,000
Add: Gross profit of Entity B for 2020 (1,000,000 – 700,000)	300,000	
Realized gross profit, beg inventory Entity B (280,000 x 40/140 x ¼)	20,000	320,000
Total		1,120,000
Less unrealized gross profit on ending inventory Entity A (400,000 x 30% x 3/5)		72,000
Consolidated gross profit 2020		1,048,000

3. *Suggested answer: (c) 51,200*

Net income reported by Entity B in separate statement	200,000
Less unrealized gross profit – upstream sale (400,000 x 30% x 3/5)	72,000
Adjusted net income of Entity B	128,000
Multiply by noncontrolling interest percentage	40%
Noncontrolling interest in net income	51,200

PROB. 5-41

1. *Suggested answer: (a) 40,000*

Depreciation – White machinery (160,000/ 16 years)	10,000
Depreciation – Black machinery (90,000/3 years)	30,000
Consolidated depreciation expense 2020	40,000

2. *Suggested answer: (b) 215.000*

Book value – White machinery (160,000 – 10,000 – 10,000)	140,000
Book value - Black machinery (90,000 – 15,000)	75,000
Consolidated book value of machinery	215,000

3. *Suggested answer: (c) 125,000*

Net income reported by Entity B in its separate statement		500,000
Add: Realized gain (upstream sale of land) (1,100,000 – 1,000,000)	100,000	
Unrealized loss (upstream sale machinery) (60,000 – 90,000)	30,000	130,000
Total		630,000
Less realized loss (upstream sale) (30,000/3 x 6/12)		5,000
Adjusted net income of Entity B 2020		625,000
Multiply by noncontrolling interest percentage		20%
Noncontrolling interest net income 2020		125,000

PROB. 5-42 *Suggested answer (c)* *0* *0* *10,000* *10,000*

Intercompany transactions may generate unrealized profit, which is a profit or gain shown in the separate financial statements of the affiliated companies, but should not be shown in the consolidated statements unless realized. In case of intercompany sale of depreciable asset, the realization of any profit is when the buying affiliate use this asset, because fixed assets are not intended for sale in the ordinary course of business. Profit from sale is spread over the useful life of the depreciable asset, thus realized profit for each year will be P10,000 (P50,000/5).

PROB. 5-43 *Suggested answer (c)* Ordinary loss of P100,000

For consolidation purposes, the purchase of P1,000,000 outstanding bonds of Seacoast by Plantation for P1,100,000 was in substance a retirement of debt for P100,000 more than the debt's carrying amount. This transaction should be reflected in the consolidated income statement as an extraordinary loss from the retirement of debt in the amount of P100,000, however current standards provides that extraordinary items shall no longer be recognized, thus an ordinary loss.

PROB. 5-44 *Suggested answer* (d) P152,000

Madonna's income form own operations		125,000
Add equity in subsidiary net income:		
Share in Jemo's net income (45,000 x 75%)	33,750	
Less dividends received (9,000 x 75%)	6,750	27,000
Consolidated net income		152,000

A company's acquisition of bonds of an affiliated unit gives rise to an intercompany debtor-creditor relationship and the related interest transactions that were recorded on the books of the two companies during the year gives rise to the same relationship. Generally, the preparation of the consolidated balance sheet requires the elimination of items like investment and reciprocal balances. The entire amount of reciprocal balances is eliminated only on the consolidated worksheet, even when a minority interest is present.

Again, a company's acquisition of bonds of an affiliated unit gives rise to an intercompany debtor-creditor relationship. In viewing the parent and its subsidiary as one entity for purposes of consolidation, both intercompany bond holdings and any related premium or discount balance lose their significance and must be eliminated. The amount paid for bonds is viewed as the cost of bond retirement, and any difference between the cost of investment and the carrying value of the obligation is recognized as a loss or gain from bond retirement. Such loss or gain is attributed to the issuing company and thus must be identified as a parent item or a subsidiary item so that it may be properly assigned to controlling and minority interest. Therefore, Palmer, Inc. (parent) will recognized a gain of P100,000 (P1,075,000 - 975,000) increasing its retained earnings by the same amount. This transaction has no effect on the minority interest of Seal (subsidiary), because the issuing company is the parent.

PROB. 5-46 *Suggested answer* (a) P1,440

Retirement price	205,000
Less carrying value of bonds (200,000 – 3,000)	197,000
Loss on retirement	8,000
Minority interest share on loss on retirement (P8,000 x 9/10 x 20%)	1,440

Another problem that may be encountered in intercompany bonds transaction is the distribution of combined net income to the controlling and minority interests. It is most common to view the purchasing affiliate as a mere agent of the issuing affiliate; therefore, it is the issuing affiliate, and not the purchaser, that must bear the entire gain or loss on retirement. In this case, the subsidiary is the issuer; thus, the minority interest shares in the loss on retirement.

PROB. 5-47 *Suggested answer (b) 630,000*

Amount paid for the purchase of net assets	700,000
Amount of cash from the net assets acquired	70,000
Net cash outflow – investing activities	630,000

The cash purchase of a firm by a controlling interest is considered an investing activity and would appear as a cash outflow in the cash flows from investing

activities section of the statement of cash flows. Thus, the net cash outflow is P630,000 as shown above.

PROB. 5-48 *Suggested answer (a) 0*

The cash purchase of a controlling interest in a firm is considered an investing activity and would appear as a cash flow in the cash flows from investing activities section of the statement of cash flows. It is also necessary to explain the total increase in consolidated assets and the addition of the minority interest to the consolidated balance sheet. This is a result of the requirement that the statement of cash flows discloses investing and financing activities that affect the firm's financial position even though they do not have impact on cash.

PROB. 5-49

a. *Suggested answer (b) P80,000 debit*

Palatka Corp.'s interest (before additional issuance) (80,000/ 100,000)	80%
Palatka Corp.'s interest (after additional issuance) (80,000/ 120,000)	66 2/3%
Ownership interest before additional issuance (7,400,000 x 80%)	5,920,000
Less Ownership interest after additional issuance (9,000,000 x 66 2/3%)	6,000,000
Increase in investment (Debit)	80,000

Since Suwannee Co. issued the additional shares to general public, the interest of the Palatka Corp. will decrease to 66 2/3%; however, the investment in stock balance will increase by P80,000 due to increase in total stockholders' equity as shown above.

b. *Suggested answer (b) P20,000*

Palatka Corp.'s interest (before additional issuance) (80,000/ 100,000)	80%

Palatka Corp.'s interest (after additional issuance) (100,000/ 120,000)	83 1//3%
Ownership interest before additional issuance (7,400,000 x 80%)	5,920,000
Less Ownership interest after additional issuance (9,000,000 x 83 1//3%)	7,500,000
Increase in investment	1,580,000
Less acquisition cost	1,600,000
Goodwill	20,000

Since Suwannee Co. issued the additional shares to Palatka Corp., the interest of the Palatka Corp. will increase to 83 1/3%; with a corresponding increase in the investment in stock by P1,580,000 and accordingly result to goodwill of P20,000.

PROB. 5-50 *Suggested answer (b)*

Consideration paid		P 40,000,000
Less: Fair value of net assets acquired:		
Owner's equity	P 31,000,000	
Increase in fair value of equipment	2,000,000	
Deferred tax liability (2,000,000 x 30%)	(600,000)	32,400,000
Goodwill		7,600,000

The revaluation of equipment upwards to fair value (carrying value of equipment is greater than the tax base) gave rise to a deferred tax liability, which will reduce the fair value of identifiable net assets and accordingly increases the amount of goodwill by P600,000, as shown above. According to IFRS 10, par B86(b), the adjusting entry is to eliminate the investment account together with the parent's share of the subsidiary's equity balance. In doing so, assets have to be measured at fair value, goodwill and deferred tax liability have to be recognized.

PROB. 5-51

1. *Suggested answer: (b) 920,000*

Book value of Investment in Entity B, cost method 12/31/2020 (900,000 + 20,000)	920,000

2. *Suggested answer: (b) 27,000*

Dividend income (30,000 x 90%)	27,000

Under the cost method, the effect in profit or loss pertains to dividend income only.

3. *Suggested answer: (c) 1,000,000*

Book value of investment in Entity B at fair value Model, 12/31/2020	1,000,000

Under the cost method, the investment in subsidiary is subsequently measured at fair value.

4. *Suggested answer: (d) 107,000*

Dividend income from subsidiary (30,000 x 90%)	27,000
Unrealized holding gain or loss on changes n fair value (1,000,000 – 900,000)	100,000
Total	127,000
Less transaction cost (expensed as incurred)	20,000
Net effect in profit or loss under the fair value model	107,000

5. *Suggested answer: (b) 950,000*

Initial measurement of investment (equity method) (900,000 + 20,000)		920,000
Add: Gain on bargain purchase [(1,100,000 x 90%) – 920,000]	70,000	
Share in adjusted net income of Entity B [(200,000 – 30,000) x 90%]	153,000	223,000
Total		1,143,000
Less dividend received from Entity B (30,000 x 90%)		27,000
Book value of investment under the equity method, 12/31/20		1,116,000
Less impairment loss of investment [(1,000,000 – 50,000) – (1,116,000]		
Book value of investment in equity method, 12/31/2020 after impairment		166,000
		950,000

6. *Suggested answer: (a) 57,000*

Gain on bargain purchase [(1,100,000 x 90%) – 920,000]	70,000
Add shares in adjusted net income of Entity B [(200,000 – 30,000) x 90%]	153,000
Total	223,000
Less impairment loss of investment [(1,000,000 – 50,000) – 1,116,000]	166,000
Net effect in profit or loss under the equity method	57,000

PROB. 5-52 *Suggested answer* (c) P70,000

White's net income from own operations	500,000
Add equity in Sol net income (250,000 x 80%)	200,000
White's consolidated net income	700,000
Multiply by minority interest percentage	10%
Minority interest in net income, 2020	70,000

The standard requires every parent to prepare a set of consolidated financial statements. An exception to this requirement arises in circumstances where the shareholders of the parent will gain limited benefit from the preparation of consolidated financial statements at this level, for example, where the parent entity is itself a wholly-owned subsidiary. The exception also applies where a partially-owned subsidiary has informed the other shareholders of the proposal not to prepare consolidated financial statements and there were no objections. The ultimate parent or the intermediate parent if one exists, is required to prepare consolidated financial statements that are publicly available and in accordance with IFRS for this exception to be available. This exception cannot be utilized where the parent has debt or equity instruments traded on any public market (or in the process of issuing debt or equity in a public market). In such circumstances, its consolidated financial statements are likely to have a wider circulation and therefore should be prepared. Thus, the minority interests in the consolidated financial statements is the 10% interest in White Co.

PROB. 5-53 *Suggested answer (a) 5,600, zero*

Book value of net assets of Solo Co./Owner`s equity	1,000,000
Add increase in fair value	40,000
Total	1,040,000
Less deferred tax liability (40,000 x 30%)	12,000
Fair value of the net assets of Solo Co.	1,028,000
Fair value adjustment (40,000 – 12,000 x 20%)	5,600
Consideration paid	800,000
Add Non-controlling interest (1,028,000 x 20%)	205,600
Total	1,005,600
Less Fair value of net assets of Taken Co.	1,028,000
Goodwill from bargain purchase	(22,400)

It should be noted that whenever assets are revalued, temporary differences may arise. When a deferred tax asset is recognized, the fair value of the identifiable net asset will increase; conversely, in case of a deferred tax liability, the fair value of the identifiable net assets will decrease. Thus, deferred tax liability is shown as deduction, thereby reducing the fair value of the identifiable net assets. The partial goodwill method is where the non-controlling interest is measured using its proportionate share of the acquiree's identifiable net assets. Under which, it is only the acquirer's share of the goodwill is brought to account in the business combination. The computations above showed gain from bargain purchase or negative goodwill, thus goodwill is zero.

The fair value adjustment, net of deferred tax liability is shared by the acquirer and the non-controlling interest.

PROB. 5-54 *Suggested answer (c) 5,600, 44,400*

Book value of net assets of Solo Co./Owner's equity	1,000,000
Add increase in fair value	40,000
Total	1,040,000
Less deferred tax liability (40,000 x 30%)	12,000
Fair value of the net assets of Solo Co.	1,028,000
Fair value adjustment (40,000 – 12,000 x 20%)	5,600

Consideration paid	1,000,000
Add Non-controlling interest (1.000,000/80% x 20%)	250,000
Total	1,250,000
Less Fair value of net assets of Taken Co.	1.028,000
Goodwill	222,000
Non-controlling interest's share from goodwill (222,000 x 20%)	44,400

Again, note that whenever assets are revalued, temporary differences may arise. The resulting deferred tax asset will increase the fair value of identifiable net assets; conversely, deferred tax liability will reduce the fair value of identifiable net assets.

The full goodwill method measures the total goodwill of the business combination at acquisition date, which is being shared by the acquirer and non-trolling interest based on their percentage ownership. Likewise, the fair value adjustment is shared by them in the same manner that of goodwill.

Chapter 6

CORPORATE LIQUIDATION

Introduction

Insolvency refers to the financial condition of a debtor that is generally unable to pay its or his liabilities as they fall due in the ordinary course of business or has liabilities that are greater than its or his assets. When an individual or a business is determined to be insolvent, creditors may assume control of the insolvent's assets in an attempt to protect their interests. In such cases, the accountant is asked to prepare the ***statement of affairs***, which shows the insolvent financial position and the status of the creditors with respect to the insolvent's assets. An *assignee* or *trustee* is appointed to take over the debtor's properties on behalf of the creditor group. The assignee converts the properties into cash and makes appropriate distribution of this cash among creditors. If any assets remain after claims have been fully satisfied, these assets are returned to the debtor.

CORPORATE DISSOLUTION VS. CORPORATE LIQUIDATION

Corporate dissolution refers to the extinguishment of the corporate franchise and the termination of corporate existence. It legally affects more the nature and capacity of the juridical being of the corporate being.

Corporate liquidation refers to the process of converting non-cash assets of a liquidation corporation into cash and distributing the net proceeds to creditors first and then the remainder to stockholders. It shall be finished within a recommendatory period of 3 years from the dissolution of a corporation

Modes of Dissolution

1. **Voluntary modes**
   a. **Where creditors are not affected** - By administrative application to SEC submitting the board resolution and ratification by the stockholders. At least majority vote of the board of directors with ratification of at least majority of stockholders

b. **Where creditors are affected** - By formal petition to SEC with notice and hearing with creditors. At least majority vote of the board of directors with ratification of at least 2/3 of stockholders

c. **By shortening of corporate term** - By amending the articles of incorporation and submitting such amendment to SEC.

d. **By merger or consolidation** - By submitting the Board resolution and ratification of the merging or consolidating corporation.

2. **Involuntary modes**
   a. By expiration of corporate term
   b. Failure to formally organize within 5 years from incorporation
   c. Legislative dissolution
   d. Dissolution by SEC on grounds under existing laws

3. **Ground for automatic dissolution of a corporation or ipso facto corporate dissolution by operation of law**
   a. By expiration of corporate term although the corporation may file an application for revival of corporation
   b. Failure to formally organize within 5 years from incorporation
   c. Approval by SEC of shortened corporate term
   d. Approval by SEC of certificate of merger or consolidation

4. **Grounds which will not automatically dissolve a corporation but will require court order or SEC decision**
   a. Being De facto
   b. Violation of laws or rulings of SEC
   c. Failure to submit annual report or financial statements to SEC
   d. Continuous inoperation for a period of at least 5 years

Modes of Corporate Liquidation

1. **Voluntary Mode** - An insolvent corporation may apply for liquidation by filing a petition for liquidation with the court. At least majority vote of the board of directors with ratification of at least 2/3 of stockholders

2. **Involuntary Mode** - Three (3) or more creditors the aggregate of whose claims is at least either One million pesos (Php1,000,000,00) or at least twenty-five percent (25%) of the subscribed capital stock or partner's contributions of the debtor, whichever is higher, may apply for and seek the liquidation of an insolvent corporation by filing a petition for liquidation of the insolvent corporation with the court.

Principles of Liquidation

- Doctrine of separate personality means that a corporation has a personality separate and distinct from the stockholders and affiliated companies.

- Limited liability rule means that the stockholders are liable only up to the extent of their capital contribution when it comes to corporation's liabilities.

- Trust fund doctrine means that assets of the corporations are considered trust fund reserved for payment of liabilities to creditors of the corporation.

- Doctrine of Piercing the veil of corporate fiction as an exception to doctrine of separate personality

  - **Fraud cases** – When corporate fiction is used to commit fraud.

  - **Alter ego cases** – When the corporation is a mere instrumentality or alter ego of the stockholders or owners.

  - **Defeat public convenience cases** – When the corporate fiction is used to commit tax evasion or to justify a wrong or to defend a crime.

  - **Equity cases** – In case of labor cases in order to promote social justice.

Deficit vs. Deficiency

Deficit refers to retained earnings with negative or debit balance. This will normally require a company to undergo quasi-reorganization a.k.a. corporate rehabilitation.

Deficiency refers to stockholders' equity with negative or debit balance. This will result to corporation liquidation.

STATEMENT OF AFFAIRS

The statement of affairs is a statement of position from a *quitting concern* point of view. Assets are reported at their estimated realizable value instead of being reported at their book values. Furthermore, instead of being classified as current and noncurrent, assets are reported as *pledge* with certain creditor groups or free and thus available to general creditors. Liabilities are reported at their balance sheet amount. The liabilities are not classified as current and noncurrent, but are listed in terms of their legal status or rank, i.e., as obligations with *priority, secured* obligations, and *unsecured* or *general* obligations.

Before the statement of affairs can be constructed, a balance sheet is prepared and certain supplementary information is assembled. Such supplementary data consist of the following:

1. Estimates and appraisals from reliable sources of the amounts that will be realized for each asset.

2. Pledge of assets that have been made on specific obligations.

3. Obligations that are expected to emerge in the course of liquidation but that are not reflected on the balance sheet.

Assets on the Statement of Affairs

The classification of assets and their presentation on the statement of affairs differ from the classification and the presentation of assets on the balance sheet. The availability of assets to unsecured creditors generally forms the basis for classification on the statement of affairs. Assets classifications are related to the liability classification on the opposite side of the statement.

Assets are ordinarily classified in group, and in the following order:

1. **Assets pledged with fully secured creditors**

   These are assets that have been pledged and that are expected to realize an amount **equal to or in excess** of the claims on which they have been pledged. In short, they are pledged assets whose value is sufficient to pay in **full** the claims of the creditors in question.

2. **Assets pledged with partially secured creditors**

   These are assets that have been pledged but that are expected to realize **less than** the amount of the claims on which they have been pledged. In short, they are pledged assets whose value is sufficient to pay **partially** the claims of the creditors in question.

3. **Free assets**

   These are assets that have **not been pledged** and hence are not related to individual liability items are reported under this heading. **Preferred claims** have first liens on these assets, and after satisfaction of these liens, the free assets, which remain are available for the payment of claims of unsecured creditors.

Liabilities and Owners' Equity on the Statement of Affairs

The classification of liabilities and their presentation on the statement of affairs differ from the classification and the presentation of liabilities on the balance sheet. On the statement of affairs, liabilities are classified according to their legal priority and secured status. Liabilities are followed by owners' equity items. Liabilities and owners' equity items are normally classified in group and in the following order:

1. **Liabilities with priority**

   These are preferred claims which, by law, be provided for in full before anything may be paid to remaining unsecured creditors. In short, they are the claims of those who, by law, have priority to the free assets in the hands of a receiver.

2. **Fully secured creditors**

These are creditors who have been pledged certain assets that are expected to realize **as much as or more than** their respective claims. In short, they are liabilities secured by the pledge of assets of a current value sufficient to permit the payment of these claims in **full.**

3. **Partially secured creditors**

   These are creditors who have been pledged certain assets that are expected to realize **less** than their respective claims. In short, they are liabilities secured by the pledge of assets of a current value sufficient to permit a **partial** payment of these claims.

4. **Unsecured creditors**

   These are creditors who are without legal priority and how have been pledged **no assets**. In short, they are liabilities not secured by the pledge of any assets and which have no priority upon free assets of the person or enterprise.

5. **Owners' Equity**

   These are balances summarizing the interests of the owners in the business and are reported under the heading "Owners' equity" or "Stockholders' Equity".

STATEMENT OF REALIZATION AND LIQUIDATION

A summary of the course of operations of a business under the direction of a trustee and involving the realization of assets and liquidation of indebtedness may be presented in the form of a special report called *statement of realization and liquidation.* Operations by a trustee are presented on the statement of realization and liquidation in a manner that permits a summary of the net business gain or loss for the period covered. The statement is usually accompanied by supplementary schedules summarizing changes in cash and in capital. It may also be accompanied by formal reports in the form of a balance sheet, an income statement, and a retained earnings statement.

MULTIPLE CHOICE – Theory of Accounts

TOA 6-1 (Adapted)

Which of the following best illustrates the insolvency of a firm?

a. The filing of bankruptcy proceedings against the firm.
b. A deficit in the firm's retained earnings.
c. The firm has more liabilities than assets.
d. The firm has negative working capital.

TOA 6 – 2 (RPCPA)

If the value of the pledged property is lesser than the obligation, what is the treatment of the liability?

a. Partially secured.
b. Fully secured.
c. Collateralized.
d. Unsecured.

TOA 6-3 (Adapted)

The primary difference between a balance sheet and an accounting statement of affairs is that:

a. A balance sheet reflects book values, while a statement of affairs emphasizes realization values.
b. Assets are arranged in a different sequence.
c. Liabilities are arranged in a different sequence.
d. Owners' equity is not considered in the statement of affairs.

TOA 6-4 (Adapted)

An accounting statement of affairs of a corporation in financial difficulty indicates that unsecured creditors would receive P0.40 on the peso. Which one of the following assets is most likely to realize the smallest percentage of its book value?

a. Accounts receivable.
b. Inventories.
c. Plant and equipment.
d. Goodwill.

TOA 6-5 (Adapted)

If a dividend of 80% is allocable to Class 7 unsecured creditors based on an accounting statement of affairs, it correctly may be concluded that

a. All unsecured claims will receive the same percentage of return.
b. All unsecured claims will be paid in full.
c. Class 1 through 6 unsecured claims will be paid in full.
d. Stockholders will receive 20% of their equity.

TOA 6-6 (Adapted)

An arrangement for creditors to accept an amount less than the amount owed to them is referred to as a

a. Charge and discharge agreement.
b. Composition agreement.
c. Bankruptcy agreement.
d. Chandler agreement.

TOA 6-7 (Adapted)

In a liquidation proceeding, if the proceeds on the realization of an asset exceed the lien against that asset, the excess is assigned to

a. The holder of the lien.
b. Other lien holders whose assets will not realize a sufficient amount to cover their liens.
c. Meet the claims of the unsecured creditors.
d. The stockholders of the corporation.

MULTIPLE CHOICE – Problems

PROB. 6-1 (AICPA)

Seco Corp. was forced into bankruptcy and is in the process of liquidating assets and paying claims. Unsecured claims will be paid at the rate of P0.40 on the peso. Hale holds a P30,000 noninterest bearing note receivable from Seco collaterized by an asset with a book value of P35,000 and a liquidation value of P5,000. The amount to be realized by Hale on this note is

a. 5,000
b. 12,000
c. 15,000
d. 17,000

PROB. 6-2 (AICPA)

Kent Co. filed a voluntary bankruptcy petition on August 15, 2020, and the statement of affairs reflected the following amounts:

	Book Value	Estimated Current Value
Assets		
Assets pledged with fully secured creditors	P 300,000	P 370,000
Assets pledged with partially secured creditors	180,000	120,000
Free assets	420,000	320,000
	P 900,000	P 810,000
Liabilities		
Liabilities with priority		P 70,000
Fully secured creditors		260,000
Partially secured creditors		200,000
Unsecured creditors		540,000
		P1,070,000

Assume that the assets are converted to cash at the estimated current values and the business is liquidated.

What amount of cash will be available to pay unsecured non-priority claims?

a. 240,000
b. 280,000
c. 320,000
d. 360,000

PROB. 6-3 (AICPA)

Scott Company filed a voluntary bankruptcy petition on June 25, 2020, and the statement of affairs reflects the following amounts:

	Book Carrying Amount	Estimated Current Value
Assets		
Assets pledged with fully secured creditors	P 160,000	P 190,000
Assets pledged with partially secured creditors	90,000	60,000
Free assets	200,000	140,000
	P 450,000	P 390,000
Liabilities		
Liabilities with priority		P 20,000
Fully secured creditors		130,000
Partially secured creditors		100,000
Unsecured creditors		260,000
		P 510,000

Assume that the assets are converted into cash at the estimated current values and the business is liquidated. What total amount of cash should the partially secured creditors receive?

a. 60,000
b. 84,000
c. 90,000
d. 100,000

PROB. 6-4 (Adapted)

In 2020, Camel Corp. was forced into bankruptcy and begun to liquidate. The following selected account balances were taken from its statement of affairs:

	Book Value	Estimated Current Value
Assets pledged with partially secured creditors	P 80,000	P 50,000
Total free assets	220,000	160,000

	Book Value	Amount Unsecured
Preferred claims	P 16,000	P 0
Partially secured liabilities	75,000	25,000
Unsecured liabilities	155,000	155,000

a. What is the total amount available for payment of claims of unsecured creditors?
   a. 0
   b. 144,000
   c. 160,000
   d. 210,000

b. What is the estimated amount of liquidating dividend per peso claim (rounded to the nearest centavo)?
   a. 0.80
   b. 0.88
   c. 1.03
   d. 1.17

c. What is the amount of deficiency to creditors?
   a. 180,000
   b. 160,000
   c. 144,000
   d. 16,000

PROB. 6-5 (Adapted)

In May 2020, it was determined that it is necessary to complete the work in process of Wild West Corp. To complete the work in process, P10,000 book value of raw materials and supplies and P10,000 conversion cost will be required. When completed, these goods will probably sell for approximately P50,000. The raw materials, which have a book value of P40,000, have an estimated total realizable value of P20,000. What is the estimated amount that will become available for unsecured creditors as a result of the realization of the work in process?

a. 50,000
b. 35,000
c. 30,000
d. 0

PROB. 6-6 (Adapted)

The following selected account balances were taken from the balance sheet of Quitting Corp. as of December 31, 2020, immediately before the take over of the trustee:

Marketable securities	P 300,000
Inventories	110,000
Land	150,000
Building	400,000

Additional information:

- Marketable securities have present market value of P320,000. These securities have been pledged to secure notes payable of P280,000.

- The estimated worth of inventories is P70,000. However, inventories with book value of P50,000 have been pledged to secure notes payable of P60,000. The realizable value of the inventories pledged is estimated to be P40,000.

- Land and building are estimated to have a total realizable value of P450,000. This property is pledged to secure the mortgage payable of P250,000.

a. What is the estimated amount available for preferred claims and unsecured creditors out of assets pledged with fully secured creditors?
   a. 840,000
   b. 810,000
   c. 770,000
   d. 240,000

b. What is the total amount of net free assets?
   a. 810,000
   b. 770,000
   c. 270,000
   d. 240,000

PROB. 6-7 (Adapted)

The accountant of Drifting Corp. prepared a statement of affairs. Assets which there are no claims or liens are expected to produce P700,000. Unsecured claims of all classes totaled to P1,050,000. The following data are claims deemed outstanding:

1. Accrued salaries, P15,000.
2. Unrecorded note for P10,000, on which P600 of interest has accrued held by Normandy Co.
3. A note for P30,000 secured by P40,000 receivable, estimated to be 60% collectible held by Jones Co.
4. A P15,000 note, on which P300 interest has accrued held by James Pty. Property with a book value of P10,000 and a market value of P18,000 is pledged to guarantee payment of principal and interest.
5. Unpaid income taxes of P35,000.

What is the amount realized by partially secured creditors?

a. 10,600
b. 19,500
c. 24,900
d. 27,900

PROB. 6-8 (Author)

An entity is experiencing financial problems which resulted to its ultimate bankruptcy. The statement of financial position of the said entity before its liquidation is presented below:

Cash	100,000		Income tax payable	200,000
Inventory	300,000		Salaries payable	300,000
Land	200,000		Notes payable	800,000
			Mortgage payable	100,000
			Accounts payable	400,000
			Contributed capital	500,000
			Deficit	(1,700,000)

The following additional data are provided:

- The notes payable is secured by the inventory with net realizable value of P250,000.
- The mortgage payable is secured by the land with fair market value of P120,000.

1. What is the amount received by the holder of the notes payable at the end of corporate liquidation?
   a. 320,000
   b. 300,000
   c. 250,000
   d. 260,000

2. What is the amount received by the holder of the mortgage payable at the end of corporate liquidation?
   a. 120,000
   b. 200,000
   c. 150,000
   d. 100,000

3. What is the amount received by the employees at the end of corporate liquidation concerning their salaries?
   a. 100,000
   b. 120,000
   c. 72,000

d. 300,000

4. What is the amount received by the national government concerning its income tax claim?
   a. 200,000
   b. 120,000
   c. 48,000
   d. none

PROB. 6-9 (Author)

A bankrupt entity has undergone corporate liquidation. Presented below is its statement of financial position before the start of liquidation:

Cash	300,000		Accounts payable	100,000
Machinery	500,000		Salaries payable	200,000
Building	1,200,000		Income tax payable	300,000
			Loans payable	400,000
			Mortgage payable	500,000
			Contributed capital	800,000
			Deficit	(300,000)

The following additional data are provided:

- Liquidation expenses amounting to P600,000 were paid.
- The loans payable is secured by the machinery which has fair value of P300,000.
- The mortgage payable is fully secured by the building.
- At the end of liquidation, the holder of loans payable received P340,000.

1. What is the recovery percentage of unsecured creditors without priority?
   a. 15%
   b. 85%
   c. 60%
   d. 40%

2. What is the amount received by the holder of accounts payable at the end of liquidation?
   a. 85,000
   b. 15,000

c. 40,000
d. 60,000

3. What is the amount of net free assets available at the end of liquidation?
   a. 80,000
   b. 40,000
   c. 120,000
   d. 200,000

4. What is the fair value or realizable value of building?
   a. 880,000
   b. 1,380,000
   c. 1,300,000
   d. 1,100,000

ANSWERS – Theory of Accounts

TOA 6 – 1 *Suggested answer (c) The firm has more liabilities than assets*

A business is considered to be insolvent if it is unable to service its liabilities, or if it technically has liabilities in excess of assets. Businesses experiencing such difficulties often are viewed as bankrupt, which is a state of lacking all or part of the means to service debts.

TOA 6-2 *Suggested answer (a) Partially secured*

Partially secured liabilities are claims where creditors have been pledged certain assets that are expected to realize less than their respective claims.

TOA 6-3 *Suggested answer (a) A balance sheet reflects book values, while a statement of affairs emphasizes realization values.*

A balance sheet is a statement of financial condition for a going business and the values therein are "going-concern" values which reflect the application of accepted principles of accounting. A statement of affairs is a statement of financial condition of a business from the standpoint of the present cash realization value of its assets and the liquidation of the liabilities of the business. It is a statement of position from a "quitting concern" point of view.

TOA 6-4 *Suggested answer (d) Goodwill*

As defined, goodwill is the present value of future excess profits over a normal rate of return. It is likely to have no realizable value if the company is in financial difficulty.

TOA 6-5 *Suggested answer (c) Class 1 through 6 unsecured claims will be paid in full.*

Classes 1 through 6 unsecured claims includes expenses to administer the estate, debts incurred after the commencement of a case of involuntary

bankruptcy but before the order for relief or appointment of a trustee, wages, unpaid contributions to employee benefit plans, customers' deposits, and taxes. While Class 7 includes claims of general creditors not granted priority. For Class 7 unsecured creditors to receive any payment, Classes 1 through 6 must be paid in full.

TOA 6-6 *Suggested answer (b) Composition agreement.*

A troubled debt restructuring may be accomplished in a variety of ways. Regardless of the method used, a formal agreement must be reached between the debtor and individual creditors. Generally such agreements take the form of a creditor agreement or a composition agreement. A creditor agreement is used to extend the terms of a debt or make other concessions regarding future interest rates. A composition agreement is used to scale down a creditor's claims against the debtor. For example, creditors might agree to accept P0.80 per peso of debt owed to them.

TOA 6-7 *Suggested answer (c) Meet the claims of the unsecured creditors.*

The amount realizable in excess of the lien form part of the free assets and is assigned to cover unsecured debts.

SOLUTIONS – Problems

PROB. 6-1 *Suggested answer* (c) P15,000

Cash received in full as secured creditor	P 5,000
Cash received as unsecured creditor [(P30,000 - 5,000) x P0.40]	10,000
Total amount realized from the note	P 15,000

*Liabilities secured by the pledge of assets of a current value sufficient to permit a **partial payment of these claims** are called partially secured liabilities. In which case, creditors who have been pledged certain assets that are expected to realize less than their respective claims will received cash equal to the liquidation value. The portion of the **unsecured claim** will be paid based on the estimated liquidating dividend per peso claim.*

PROB. 6-2 *Suggested answer* (d) P360,000

Estimated current value of assets pledged with fully secured creditors		P 370,000
Add estimated current value of free assets		320,000
Total		690,000
Less Liabilities:		
Fully secured creditors	P 260,000	
With priority	70,000	330,000
Total cash available for unsecured claims		P360,000

***Assets pledged with fully secured creditors** are assets that have been pledged and that are expected to realize an amount **equal to or in excess** of the claims on which they have been pledged. In short, they are pledged assets whose value is sufficient to pay in **full** the claims of the creditors in question. **Free assets** are assets that have not been pledged and hence are not related to individual liability items are reported under this heading. Preferred claims have first liens on these assets, and, after satisfaction of these liens, the remaining free assets are available for the payment of claims of unsecured creditors. Unpledged properties are sold by the trustee, and cash is accumulated for ultimate distribution to creditors with priority and*

then to general or unsecured creditors. Properties that have been pledge to creditors as security are converted into cash, and the proceeds are applied first to the respective ***secured claims****. If certain pledged property* ***fails*** *to realize an amount equal to the claim against it, the unpaid balance of the claim becomes an* ***unsecured*** *or* ***general claim*** *against the debtor. However, if the pledged property realizes* ***more than amount of the claim****, the excess becomes available to the trustee for distribution to* ***creditors with priority*** *and to* ***unsecured creditors****.*

PROB. 6-3 *Suggested answer* (b) P84,000

Estimated current value of assets pledged with fully secured creditors		P 190,000
Add estimated current value of free assets		140,000
Total		330,000
Less Liabilities:		
Fully secured creditors	130,000	
With priority	20,000	150,000
Total cash available for unsecured claims		180,000
Divide by unsecured claims [(100,000 - 60,000) + 260,000]		300,000
Estimated liquidation value per peso claim		0.60
Multiply by unsecured portion of partially secured creditors		40,000
Total amount received based on liquidation value per peso claim		24,000
Add secured portion		60,000
Total amount of cash received by partially secured creditors		P 84,000

The requirement is to determine the total amount of cash the partially secured creditors should receive. The estimated liquidation value per peso claim, as computed above, amounted to P0.60, this amount must be applied to the unsecured portion of P40,000, plus the estimated current value of the assets pledged with partially secured creditors in the amount of P60,000;

thus, the total amount of cash received by partially secured creditors is P84,000.

PROB. 6-4

a. *Suggested answer* (b) P144,000

Estimated current value of free assets	P 160,000
Less preferred claims	16,000
Total amount available to unsecured creditors	P 144,000

Free assets are assets that have not been pledged and not related to any liability. Preferred claims have first liens on these assets, and after satisfaction of these liens, the remaining free assets are available for the payment of unsecured claims.

b. *Suggested answer* (a) P0.80

Estimated current value of free assets	P 160,000
Less preferred claims	16,000
Total amount available to unsecured creditors	144,000
Divide by total unsecured liabilities (155,000 + 25,000)	180,000
Estimated liquidating dividend per peso claim	P 0.80

Estimated liquidating dividend is the estimated amount available to unsecured creditors per peso claim, and may be computed by determining the net free assets (total free assets less preferred claims) by the total amount of unsecured liabilities.

c. *Suggested answer* (d) P36,000

Total amount available to unsecured creditors	P 144,000
Less total unsecured liabilities	180,000
Deficiency to creditors	P 36,000

The statement of affairs should be supplemented by a statement of deficiency. The function of this statement is to show, in detail and in orderly manner the following: 1.) the estimated losses and gains expected to be

incurred on the realization of assets; 2.) the estimated net loss expected to be incurred on the realization of all assets; and 3.) the distribution of this net loss to proprietary interests, and creditors.

If the net loss exceeds the books net worth, the excess, in case of a corporation, falls upon creditors, such excess being technically called ***deficiency to creditors.*** *In partnership and sole proprietorship, creditors have claims against the owners personally for the satisfaction of this excess loss. Alternatively, in the statement of affairs, deficiency to creditors is the difference between the total amount available to unsecured creditors and the total unsecured liabilities.*

PROB. 6-5 *Suggested answer* (b) P35,000

Estimated value upon completion		P 50,000
Less cost to complete:		
Raw materials [P10,000 x (20,000/40,000)	P 5,000	
Conversion cost	10,000	15,000
Amount expected to realized upon completion		P 35,000

When it is considered advantageous to complete work in process, the value to be entered in the estimated amount that will become available for unsecured creditors as a result of the realization of the assets is the ***estimated sales value of goods after completion,*** *net of estimated cost to complete. The estimated cost to complete is the sum of the raw materials, taken at* ***present realizable values****, plus all other expenditures (labor and overhead) necessary to produce the finished product.*

PROB. 6-6

a. *Suggested answer* (d) P240,000

Marketable securities (P320,000 - 280,000)	P 40,000
Land and building (P450,000 - 250,000)	200,000
Estimated amount available out of assets pledged with fully secured creditors	P 240,000

*The requirement is to determine the amount available for preferred claims and unsecured creditors out of assets pledged with **fully secured creditors**. The amount available for preferred claims and unsecured creditors must be the free assets.*

*Based on the foregoing information, assets pledged with fully secured creditors are marketable securities and land and building, because the expected realizable amount of these assets is more than the amount of claims on which they have been pledged. Since the expected realizable amount of inventories **pledged** is less than the amount of claims, a portion of this asset may be classified as assets pledged with **partially secured creditors** and the remaining portion is **free asset.***

b. *Suggested answer* (c) P270,000

Marketable securities (P320,000 - 280,000)	P 40,000
Land and building (P450,000 - 250,000)	200,000
Unpledged portion of inventories (P70,000 - 40,000)	30,000
Total amount of net free assets	P 270,000

***Net free asset** is the total free assets minus the preferred claims. Based on the foregoing information, no amount of preferred claim was presented, thus it was assumed that the total free asset is equal to net free asset, which could be made available for unsecured creditors.*

PROB. 6-7 *Suggested answer (d) P27,900*

Total Free Assets		700,000
Less unsecured claims with priority:		
Accrued salaries	15,000	
Unpaid income taxes	35,000	50,000
Net Free Assets		650,000
Divide by total unsecured claims without priority:		
Total unsecured claims of all classes (with or without priority)	1,050,000	
Less unsecured claims with priority (accrued salaries and unpaid taxes)	50,000	1,000,000

% of recovery	65%
Realizable amount of Accounts Receivable (60% x P40,000)	24,000
Add unsecured portion [(P30,000 – 24,000) x 65%]	3,900
Total amount realized by partially secured creditors	27,900

The total unsecured claim of all classes is basically composed of unsecured claims with and without priorities. It shall be applied first to unsecured claims with priority; then, to unsecured claims without priority.

PROB. 6-8

1. *Suggested answer: (c) 250,000*

Amount received by holder of note payable (NRV of inventory)	250,000

Note: Only the net realizable value of collateral inventory will be received since there is no available net free asset.

2. *Suggested answer: (d) 100,000*

Amount received by holder of mortgage payable (Fair value of land)	100,000

Note: The mortgage payable will be fully collected because it is fully secured credit.

3. *Suggested answer: (b) 120,000*

Cash	100,000
Add free assets from fully secured mortgage payable (120,000 – 100,000)	20,000
Total free assets for unsecured credits with priority	120,000

Note: Since only P120.000 free assets are available, it must all be given to employees who are preferred over the government.

4. *Suggested answer: (d) None*

Amount received by national government for income taxes	None

Note: Since only P120.000 free assets are available, it must all be given to employees for their salaries which are preferred over the claims of the government for income taxes.

PROB. 6-9

1. *Suggested answer (d) 40%*

Amount received by partially secured loans payable	340,000
Less fair value of collateral machinery	300,000
Recovered amount from the unsecured portion of partially secured loans payable	40,000
Divide by unsecured portion of partially secured loans Payable (400,000 – 300,000)	100,000
Recovery percentage on unsecured credits	40%

2. *Suggested answer: (c) 40,000*

Amount received by holder of accounts payable (100,000 x 40%)	40,000

3. *Suggested answer: (a) 80,000*

Accounts payable	100,000
Add unsecured portion of partially secured loans payable (400,000 – 300,000)	100,000
Total unsecured credits including unsecured portion of	

Partially secured loans payable	200,000
Multiply by recovery percentage of unsecured credits	40%
Net free assets	80,000

4. *Suggested answer: (b) 1,380,000*

Net free assets		80,000
Add: Liquidation expenses paid	600,000	
Salaries payable	200,000	
Income tax payable	300,000	
Total		1,100,000
Less cash		1,180,000
Free assets from building used as collateral for fully secured mortgage payable		300,000
Add book value of fully secured mortgage payable		880,000
Fair value of building used as collateral of mortgage payable		500,000
		1,380,000

Chapter 7

COST ACCUMULATION AND JOB ORDER COSTING

Introduction

Cost accounting neither adds new steps to the familiar accounting cycle nor discards the principles of financial accounting. Cost accounting is concerned with recording and measuring cost elements as the related resources flow through the productive process. The flow of costs parallels the flow of resources, all manufacturing costs, regardless of their fixed or variable behavior, flow through the work in process and finished goods inventory account. The manufacturing process, the physical arrangement of the factory, and the decision-making needs of managers constitute the basis for determining how cost will be accumulated.

COST ACCUMULATION

Cost may be classified in relation to a product, like, manufacturing and non-manufacturing costs.

1. Manufacturing costs/product costs – Amounts which can be capitalized as part of inventoriable costs.
   - Direct materials – They are materials that become part of a finished product and can be conveniently traced to specific product units
   - Direct labor – It includes all labor costs for specific work performed on products that can be conveniently traced to end products. Examples: Wages of machine operators and factory workers
   - Factory overhead – It is a catchall for manufacturing costs that are a varied collection of production-related costs that cannot be practically or conveniently traced directly to end products. Examples: Indirect materials, indirect labor and other indirect factory costs.

- Prime costs – Direct labor costs + direct materials costs
- Conversion costs – Direct labor costs + factory overhead costs

2. Non-manufacturing costs/period costs
   - Marketing/selling or distribution costs – include all costs necessary to secure customer orders and get the finished product or service into the hands of the customer. Examples: Sales commission, advertising and promotion expenses.
   - Administrative or general costs – include all executive, organizational and clerical expenses that cannot logically included under either production or marketing. Examples: Legal, accounting & audit fees and Bad debt expense.

The basic purpose of any costing system is to allocate these costs of production to the units produced. Direct materials and direct labor are easily traced to a product or service. But overhead must be accumulated over a period and allocated to the product manufactured or services rendered using some reasonable basis.

Actual Costing System

It is the recording of product costs based on the actual cost of materials, actual cost of labor, and actual overhead cost incurred. Actual direct material and direct labor costs are accumulated in Work in Process Inventory as the costs incurred. Actual production overhead costs are accumulated separately in an Overhead Control Account and are assigned to Work in Process Inventory at the end of a period or at completion of production.

This costing system is the simplest costing method, because it does not consider any budgeted or standard amounts. However, the use of this method is less desirable, because it will take longer to formulate a valuation for ending inventory and the cost of goods sold, since all actual costs must be compiled and allocated. This method is similar with normal costing, where the key difference is the use of a budgeted amount of overhead in normal costing.

Normal Costing System

It is used to derive the cost of a product by using actual cost of materials, actual cost of labor, and a predetermined overhead rate, which is applied using the product's actual usage as allocation base; such as, direct labor hours or machine time. In other words, the overhead rate under normal costing is based on the expected overhead costs for the entire accounting year and the expected production volume for the entire year. A predetermined overhead rate is a budgeted and constant charge per unit of activity that is used to assign overhead cost from an Overhead Control account to Work in Process Inventory for the period's production or services.

Any difference between the predetermined (standard) overhead and the actual overhead cost is closed to cost of goods sold, if the amount is not significant, or prorated among the cost of goods sold, work in process inventory and finished goods inventory, if significant. Normal costing varies from standard costing in a way that the latter uses entirely predetermined costs for all of a product.

Standard Costing System

This costing system costs its manufactured products with a predetermined materials cost, a predetermined direct labor cost, and a predetermined manufacturing overhead cost. It is a practice of substituting an expected cost for an actual cost in costing its products and periodically recording variances, which are the difference between the standard costs and actual costs. The difference between the standard costs and actual costs is closed to cost of goods sold, if the amount is not significant. If the variances are significant, these should be prorated to the cost of goods sold, work in process inventory, and finished goods inventory. This topic will be discussed in detail in the later part of this book.

JOB ORDER COSTING

Job order cost systems compile details of costs on individual jobs. In job order costing, jobs are sufficiently different and few in number that some costs are traced directly to individual jobs. In other words, job order cost accounting systems are those that accumulate costs for each batch, lot, or customer order. The collection of all these job records, which traditionally are called *job order cost sheets*, serves as the subsidiary ledger for the work in process account of the general ledger. This is an important technical distinction of job order costing, because in a process costing

systems the work in process subsidiary ledger may consist of one account for each department or process in a factory, or, instead of a subsidiary ledger, there may be a general ledger account for each department's work in process inventory.

Accounting for Materials

Materials accounting maintains materials inventory records, charges direct materials to jobs, and charges indirect materials to overhead. The cost accounting for purchased materials is the same as it is for any perpetual inventory system.

Consequently, as materials are received, the account Materials is debited. While direct materials used for a job are issued to the factory on the basis of materials requisitions, which are documents prepared by production schedulers or other personnel specifying the job number and type and quantity of materials required. The flow of direct materials from storeroom to factory is accounted for as a transfer of cost from Materials to Work in Process.

Requisitions are also used in issuing indirect materials or supplies. If not used in the factory, supplies are charged to marketing or administrative expense accounts; however, if used in the factory, they are charged to Factory Overhead Control.

Accounting for Labor

Labor accounting maintains payroll-related accounts, charges direct labor to jobs, and charges indirect labor to overhead. To identify direct and indirect labor costs, each worker prepares one or more labor time tickets each day. Each labor time ticket is a document showing the time spent by one worker on a job order (direct labor) or any other task (indirect labor). Time tickets are costed and summarized, and time ticket hours for each employee are reconciled periodically with clock card hours.

Accounting for Factory Overhead

Overhead accounting, which is an important part of job order costing and any other costing system, accumulates overhead costs, maintains overhead detail records, and charges a share of overhead to each job. Overhead consists of all manufacturing costs other than direct materials and direct manufacturing labor. The distinguishing feature

of manufacturing overhead is that while it must be incurred in order to produce goods, It cannot be directly traced to the final product as can direct materials and direct manufacturing labor. Therefore, overhead must be applied, rather than direct charged, to good produced. Debits to the factory overhead control account reflect actual overhead costs incurred during the period, while credits reflect applied amounts. Because the debits and credits are seldom equal, there is usually a debit or credit balance in the account. A debit balance indicates that overhead has been underapplied, and a credit balance means that overhead has been overapplied.

At the end of an accounting period, over-or-underapplied factory overhead can be treated as a period cost to cost of goods sold (if the amount is insignificant), or as adjustment to all goods (work in process, finished goods, and cost of goods sold) which were recorded at the erroneous application rate during the current period.

ACCOUNTING FOR PRODUCTION LOSSES - JOB ORDER COSTING

Production losses in a job order cost system include the cost of materials scrap, spoiled goods, and reworking defective goods.

Accounting for Scrap

It includes the filings or trimmings remaining after processing materials, defective materials cannot be used or returned to the vendor, and broken parts resulting from employee or machine failure. If scrap has a value, the full amount realized from the sale of scrap and waste can be accounted for in any one of the following, as long as the alternative chosen is consistently used: 1.) the amount accumulated can be closed directly to Income Summary and shown in the income statement as other income; 2.) the amount accumulated can be credited to Cost of Goods Sold; 3.) the amount accumulated can be credited to Factory Overhead Control; and 4.) when the scrap is directly traceable to an individual job, the amount realized from the sale can be treated as a reduction in the material cost charged to that job (work in process).

Accounting for Spoilage

Spoiled goods differ from scrap in that they are partially or fully completed units that are defective in some way. Spoiled goods are not correctable either because technically it is not possible to correct them or because it is not economical to correct

them. The accounting treatment for spoiled goods depends on the following events causing the spoilage:

1. Spoilage Caused by the Customer

   If spoilage occurs because of some action taken by the customer, it should not be regarded as a cost of quality. The customer should pay for this kind of spoilage. The unrecoverable cost of the spoiled goods should be *charged to that job* (that is, the salvage value of the spoiled goods should be removed from the job, but all costs in excess of the salvage value should remain in the job and be charged to the customer).

2. Spoilage Caused by an Internal Failure

   When spoilage is attributable to general factory conditions, the unrecoverable cost of the spoiled goods should be *charged to Factory Overhead Control*. If the spoiled goods have a salvage value, they should be inventoried at the salvage value, and the related cost in excess of the salvage value should be charged to Factory Overhead Control account. The cost of abnormal spoilage is recorded as period cost or expense.

Accounting for Rework

It is the process of correcting defective goods. As with spoilage, rework can result from either an action taken by the customer (which should not be regarded as a cost of quality) or from internal quality failures. And as with spoilage, the accounting treatment depends on the cause of the rework. Again, if the rework cost is abnormal, it shall be recorded as period cost or expense.

MULTIPLE CHOICE – Theory of Accounts

TOA 7-1 (Adapted)

Which of the following is least likely to be an objective of a cost accounting system?

a. Product costing.
b. Department efficiency.
c. Inventory valuation.
d. Sales commission determination.

TOA 7-2 (Adapted)

Which of the following categories of cost is most likely not considered a component of fixed factory overhead?

a. Rent
b. Property taxes
c. Depreciation
d. Power

TOA 7-3 (Adapted)

The term direct cost and indirect cost are commonly used in accounting. A particular cost might be considered a direct cost of a manufacturing department but an indirect cost of the product produced in the manufacturing department. Classifying a cost as either direct or indirect depends upon

a. The behavior of the cost in response to volume changes.
b. Whether the cost is expensed in the period in which it is incurred.
c. The cost object to which the cost is being related.
d. Whether an expenditure is unavoidable because it cannot be changed regardless of any action taken.

TOA 7-4 (Adapted)

Which of the following best described direct labor?

a. A prime cost
b. A period cost
c. A product cost
d. Both product cost and prime cost

TOA 7-5 (Adapted)

There are several alternative denominator measures for applying overhead. Which is not commonly used?

a. Direct labor hours
b. Direct labor cost
c. Machine hours
d. Sales value of product produced

TOA 7-6 (Adapted)

When the amount of overapplied factory overhead is significant, the entry to close overapplied factory overhead will most likely require

a. A debit to cost of goods sold.
b. Debits to cost of goods sold, finished goods inventory, and work in process inventory
c. A credit to cost of goods sold.
d. Credits to cost of goods sold, finished goods inventory, and work in process inventory

TOA 7-7 (AICPA)

Supplies needed for use in the factory are issued on the basis of:

a. Job cost sheets
b. Material requisitions
c. Time tickets
d. Factory overhead analysis sheets

TOA 7-8 (Adapted)

When a manufacturing company has a highly automated plant producing many different products, probably the most appropriate basis of applying factory overhead costs to work in process is

a. Units processed
b. Machine hours
c. Direct labor hours
d. Direct labor costs

TOA 7-9 (Adapted)

The logical explanation for an entry that includes a debit to Overhead control and a credit to Prepaid Insurance is

a. The insurance company sent the company a refund of its policy premium.
b. Overhead for insurance was applied to production.
c. Insurance for production equipment expired.
d. Insurance was paid on production equipment.

TOA 7-10 (AICPA)

Overapplied factory overhead would result if

a. The plant were operated at less than normal capacity.
b. Factory overhead costs incurred were less than costs charged to production.
c. Factory overhead costs incurred were unreasonably large in relation to units produced.
d. Factory overhead costs incurred were greater than costs charged to production.

TOA 7-11 (Adapted)

The appropriate method for the disposition of underapplied or overapplied factory overhead

a. Is to cost of goods sold only.
b. Is to finished goods inventory only.
c. Is apportioned to cost of goods sold and finished goods inventory.
d. Depends on the significance of the amount.

TOA 7-12 (Adapted)

At the end of the year, Phil Co. had the following account balances after applied factory overhead had been closed to Factory Overhead Control:

Factory overhead control	P 1,000 cr.
Cost of goods sold	980,000 dr.
Work in process	38,000 dr.
Finished goods	82,000 dr.

The most common treatment of the balance in factory overhead control would be to

a. Carry it as a deferred credit on the balance sheet.
b. Report it as miscellaneous operating revenue on the income statement.
c. Credit it to cost of goods sold.
d. Prorate it among work in process, finished goods, and cost of goods sold.

TOA 7-13 (AICPA)

Application rates for factory overhead best reflect anticipated fluctuations in sales over a cycle of years when they are computed under the concept of

a. Maximum capacity
b. Normal capacity
c. Practical capacity
d. Expected actual capacity

TOA 7-14 (AICPA)

Cox Co. found the differences in product costs resulting from the application of predetermined overhead rates rather than actual overhead rates were immaterial even though actual production was substantially less than planned production. The most likely explanation is that

a. Overhead was composed chiefly of variable costs.
b. Several products were produced simultaneously.
c. Fixed factory overhead was a significant cost.
d. Costs of overhead items were substantially higher than anticipated.

TOA 7-15 (Author)

It is a costing system that values manufactured products with the actual material costs, actual direct labor costs and manufacturing overhead based on a predetermined manufacturing overhead rate.

a. Actual costing system
b. Normal costing system
c. Standard costing system
d. Budgeted costing system

TOA 7-16 (Author)

If the under or over applied factory overhead is significant, it shall be closed to
a. Cost of goods sold only
b. Finished goods and cost of goods sold proportionately
c. Work in process, finished goods and cost of goods sold proportionately
d. Raw materials, work in process, finished goods and cost of goods sold proportionately

TOA 7-17 (Author)

Which of the following will increase the cost of goods manufactured for the period?
a. Decrease in finished goods inventory for the period
b. Decrease in work in process for the period
c. Increase in direct materials for the period
d. Decrease in salaries payable for the period

TOA 7-18 (Author)

In a manufacturing company, which of the following product costs shall be considered as prime cost and conversion cost at the same time?
a. Salary of the factory security guard
b. Freight in of the direct material
c. Depreciation expense of sewing machine
d. Employee benefits of factory worker

TOA 7-19 (Author)

In a manufacturing company, which of the following product costs shall be considered as prime cost but not conversion cost?
a. Insurance while in transit of the direct materials
b. Utility cost of the factory
c. Salary of the factory workers
d. Creditable value added tax

TOA 7-20 (Author)

In a manufacturing company, which of the following product costs shall be considered as conversion cost but not prime cost?

a. Irrecoverable import duties of direct materials
b. Employee benefits of factory worker
c. Foreign exchange difference on inventory loan
d. Amortization cost of the patent covering a machinery used for production

TOA 7-21 (Author)

In a manufacturing company, which of the following shall be considered as period cost?

a. Employee benefit of factory security guard
b. Freight out, warranty cost and sales commission
c. Costs of normal waste
d. Storage costs of work in process inventory

TOA 7-22 (Adapted)

The flow of costs in job order costing

a. Begins with work in process inventory and ends with finished goods inventory.
b. Begins as soon as a sale occurs.
c. Parallels the physical flow of materials as they are converted into finished goods.
d. Is necessary to prepare the cost of goods manufactured schedule.

TOA 7-23 (AICPA)

Under job order cost accumulation, the factory overhead control account controls:

a. Factory overhead analysis sheets.
b. Job order cost sheets.
c. Cost reports by processes
d. Material inventories

TOA 7-24 (AICPA)

In a traditional job order cost system, the issuance of supplies to a production department increases

a. Stores control
b. Work in process control
c. Factory overhead control
d. Factory overhead applied

TOA 7-25 (AICPA)

In a job order cost system, the use of direct materials previously purchased usually recorded as an increase in

a. Work in process control
b. Factory overhead control
c. Factory overhead applied
d. Stores control

TOA 7-26 (AICPA)

In a job order cost system, direct labor costs usually are recorded initially as an increase in

a. Factory overhead applied
b. Factory overhead control
c. Finished goods control
d. Work in process control

TOA 7-27 (AICPA)

In a job order cost system, the application of factory overhead is usually reflected in the general ledger as an increase in

a. Factory overhead control
b. Finished goods control
c. Work in process control
d. Cost of goods sold

TOA 7-28 (AICPA)

Under a job order cost system, the peso amount of the general ledger entry involved in the transfer of inventory from work in process to finished goods is the sum of costs charged to all jobs

a. Started in process during the period.
b. In process during the period.
c. Completed and sold during the period.
d. Completed during the period.

TOA 7-29 (AICPA)

A direct labor overtime premium should be charged to a specific job when the overtime is caused by the

a. Increased overall level of activity.
b. Customer's requirement for early completion of the job.
c. Management's failure to include the job in the production schedule.
d. Management's requirement that the job be completed before the annual factory vacation closure.

TOA 7-30 (Adapted)

A company experienced a machinery breakdown on one of its production lines. As a consequence of the breakdown, manufacturing fell behind schedule and a decision was made to schedule overtime to return manufacturing to schedule. Which one of the following methods is the proper way to account for the overtime paid to the direct laborers?

a. The overtime hours times the sum of the straight-time wages and overtime premium would be charged entirely to manufacturing overhead.
b. The overtime hours times the sum of the straight-time wages and overtime premium would be treated as direct labor.
c. The overtime hours times the overtime premium would be charged to repair and maintenance expense, and the overtime hours times the straight-time wages would be treated as direct labor.
d. The overtime hours times the overtime premium would be charged to manufacturing overhead, and the overtime hours times the straight-time wages would be treated as direct labor.

TOA 7-31 (AICPA)

In job order cost system, payroll taxes paid by the employer for factory employees are usually accounted for as

a. Direct labor
b. Factory overhead
c. Indirect labor
d. Administrative costs

TOA 7-32 (AICPA)

In a job order cost system, factory (manufacturing) overhead is

	An Indirect Cost of Jobs	A Necessary Element of Production
a.	No	Yes
b.	No	No
c.	Yes	Yes
d.	Yes	No

TOA 7-33 (AICPA)

In service businesses using job order costing, the most commonly used base for applying overhead to jobs is

a. Machine hours
b. Direct materials consumed
c. Direct labor cost
d. Meals, travel, and entertainment

TOA 7-34 (AICPA)

In service businesses using job order costing, the hourly rate used to charge costs to a job usually includes

a. Both labor and overhead cost
b. Labor cost only
c. Overhead cost only
d. Labor, overhead and miscellaneous costs

TOA 7-35 (Adapted)

Which of the following organization would be most likely to use a job order costing system?

a. The loan department of a bank.
b. The check clearing department of a bank.
c. A manufacturer of processed cheese food.
d. A manufacturer of video cassette tapes.

TOA 7-36 (AICPA)

A job order cost system uses a predetermined factory overhead rate based on expected volume and expected fixed cost. At the end of the year, underapplied overhead might be explained by which of the following situations?

	Actual Volume	Actual Fixed Costs
a.	Greater than expected	Greater than expected
b.	Greater than expected	Less than expected
c.	Less than expected	Greater than expected
d.	Less than expected	Less than expected

TOA 7-37 (AICPA)

A company services office equipment. Some customers bring their equipment to the company's service shop; other customers prefer to have the company's service personnel come to their offices to repair their equipment. The most appropriate costing method for the company is

a. A job order costing system.
b. An activity-based costing system.
c. A process costing system.
d. An operations costing system.

TOA 7-38 (Adapted)

Two basic costing systems for assigning costs to products or services are job order and process costing. These two costing systems are usually viewed as being on opposite ends of a spectrum. The fundamental criterion employed to determine whether job costing or process costing should be employed is

a. Proportion of direct (traceable) costs expended to produce the product or service.
b. Number of cost pools employed to allocate the indirect costs to the product or service.
c. Type of bases used in allocating the indirect cost pools to the product or service.
d. The nature and amount of the product or service brought to the market place for customer consumption.

TOA 7-39 (Adapted)

In a manufacturing environment, the job order costing system and process cost system differ in the way

a. Costs are assigned to production runs and the number of units for which costs are averaged.
b. Orders are taken and the number of units in the orders.
c. Product profitability is determined and compared with planned costs.
d. Processes can be accomplished and the number of production runs that may be performed in a year.

TOA 7-40 (Author)

In job order costing, normal spoilage which is a characteristic of a given production cycle shall be

a. Expensed as incurred
b. Charged or capitalized to a specific job
c. Closed to factory overhead account
d. Debited to work in process account

TOA 7-41 (Author)

In job order costing, normal rework cost which is attributable to a specific job shall be

a. Expensed as incurred
b. Charged or capitalized to that particular job
c. Closed to factory overhead account
d. Debited to work in process account

MULTIPLE CHOICE – Problems

PROB. 7-1 (AICPA)

Following are Mill Co.'s production costs for October:

Direct materials	100,000
Direct labor	90,000
Factory overhead	4,000

What amount of cost should be traced to specific products in the production process?

a. 194,000
b. 190,000
c. 100,000
d. 90,000

PROB. 7-2 (AICPA)

Fab Co. manufactured textiles. Among Fab's manufacturing costs were the following salaries and wages:

Loom operators	120,000
Factory foreman	45,000
Machine mechanics	30,000

What was the amount of Fab's direct manufacturing labor?

a. 195,000
b. 165,000
c. 150,000
d. 120,000

PROB. 7-3 (AICPA)

Rudolph Co. makes aluminum fasteners. Among Rudolph's manufacturing costs for the year were

Materials and supplies:

Aluminum	400,000
Machine parts	18,000
Lubricants for machines	5,000

Direct materials amounted to

a. 23,000
b. 400,000
c. 405,000
d. 418,000

PROB. 7-4 (RPCPA)

The following selected information pertains to Top Gun Manufacturing, Inc.: direct materials of P625,000, indirect materials of P125,000, direct labor of P750,000, indirect labor of P112,500, and factory overhead (not including indirect materials and indirect labor) of P375,000.

Compute conversion costs:

a. 1,375,000
b. 1,362,500
c. 2,500,000
d. 2,737,500

PROB. 7-5 (Adapted)

Childers Co. manufactures widgets. During the fiscal year just ended, the company incurred prime costs of P1,500,000 and conversion costs of P1,800,000. Overhead is applied at the rate of 200% of direct labor cost. How much of the above costs represent direct materials cost?

a. 1,500,000
b. 300,000
c. 900,000
d. 600,000

PROB. 7-6 (RPCPA)

X-Files Productions, Inc. has manufactured 100,000 units of compound X in May at the following costs:

Labor of P242,500 of which 93% represents direct labor.
Materials of P182,500 of which 90% represents direct materials.
Opening work in process of P88,125.
Closing work in process inventory of P67,500.

Factory overhead is 125% of direct labor costs and includes indirect materials and indirect labor. Compute cost of goods manufactured.

a. 671,150
b. 692,306
c. 651,056
d. 629,900

PROB. 7-7 (Adapted)

During the current accounting period, a manufacturing company purchased P70,000 of raw materials, of which P50,000 of direct materials and P5,000 of indirect materials were used in production. The company also incurred P45,000 of total labor costs and P20,000 of other factory overhead costs. An analysis of the work in process control account revealed P40,000 of direct labor costs. Based upon the above information, what is the total amount accumulated in the factory overhead control account?

a. 25,000
b. 30,000
c. 45,000
d. 50,000

PROB. 7-8 (AICPA)

The following information pertains to Arp. Co.'s manufacturing operations:

Inventories	3/1	3/31
Direct materials	36,000	30,000
Work in process	18,000	12,000
Finished goods	54,000	72,000

Additional information for the month of March:

Direct materials purchased	84,000
Direct manufacturing labor	60,000
Direct manufacturing labor rate per hour	7.50
Factory overhead rate per direct labor hour	10.00

a. For the month of March, prime cost was
   a. 90,000
   b. 120,000
   c. 144,000
   d. 150,000

b. For the month of March, conversion cost was
   a. 90,000
   b. 140,000
   c. 144,000
   d. 170,000

c. For the month of March, cost of goods manufactured was
   a. 218,000
   b. 224,000
   c. 230,000
   d. 236,000

PROB. 7-9 (AICPA)

The following information was taken from Kay Co.'s accounting records for the year ended December 31:

Increase in raw materials inventory	15,000
Decrease in finished goods inventory	35,000
Raw materials purchased	430,000
Direct manufacturing labor payroll	200,000
Factory overhead	300,000
Freight out	45,000

There was no work in process inventory at the beginning or end of the year. Kay's cost of goods sold is
a. 950,000
b. 965,000
c. 975,000
d. 995,000

PROB. 7-10 (RPCPA)

Rumours Co. applies factory overhead as follows:

Department	Per Machine Hour
Fabricating	7.75
Spreading	15.10
Gossiping	2.125

Actual machine hours are: 19,000 hours for Fabricating, 27,500 hours for Spreading and 5,500 hours for Gossiping. If the actual factory overhead expenses for the period is P574,375, how much is over (under) applied factory overhead?

a. (11,875.00)
b. (23,562.50)
c. (187.50)
d. (76,125.00)

PROB. 7-11 (AICPA)

The Waitkins Co. estimated Department A's overhead at P255,000 for the period based on an estimated volume of 100,000 direct labor hours. At the end of the period, the factory overhead control account for Department A had a balance of P265,500; actual direct labor hours were 105,000. What was the over or underapplied overhead for the period?

a. 2,250
b. (2,250)
c. 15,000
d. (15,000)

PROB. 7-12 (AICPA)

Cherokee Co. applies factory overhead on the basis of direct labor hours. Budget and actual data for direct labor and overhead for the year are as follows:

	Budget	Actual
Direct labor hours	600,000	650,000
Factory overhead costs	P 720,000	P 760,000

The factory overhead for Cherokee for the year is

a. Overapplied by P20,000.
b. Overapplied by P40,000.
c. Underapplied by P20,000.
d. Underapplied by P40,000

PROB. 7-13 (AICPA)

Worley Co. has underapplied overhead of P45,000 for the year. Before disposition of underapplied overhead, selected year-end balances from Worley's accounting records were

Sales	1,200,000
Cost of goods sold	720,000
Direct materials inventory	36,000
Work in process inventory	54,000
Finished goods inventory	90,000

Under Worley's cost accounting system, over or underapplied overhead is assigned to appropriate inventories and cost of goods sold based on year-end balances. In its year-end income statement, Worley should report cost of goods sold of

a. 682,500
b. 684,000
c. 757,500
d. 765,000

PROB. 7-14 (Adapted)

At the end of the last fiscal year, Baehr Co. had the following account balances:

Overapplied overhead	6,000
Cost of goods sold	980,000
Work in process	38,000
Finished goods	82,000

If the most common treatment of assigning overapplied overhead was used, the final balance in cost of goods sold would have been

a. 985,340
b. 974,660
c. 974,000
d. 986,000

PROB. 7-15 (Author)

An entity employs normal costing for its production. The following data are provided during the year:

Net purchase of raw materials during the year	500,000
Total labor cost during the year	800,000
Depreciation of factory assets during the year	100,000
Utilities on the factory during the year	300,000

	Beginning	Ending
Raw materials inventory	200,000	300,000
Work in process inventory	500,000	200,000
Finished goods inventory	600,000	300,000

Additional notes are provided:

- The entity uses a single account for its direct material and indirect materials. Direct material used is three times the indirect material used.
- The indirect labor cost is 1/8 of the total labor costs.
- The overhead application rate is 80% of direct labor costs.
- Any over or under application of overhead is considered material.

1. What is the total manufacturing cost during the year?
   a. 1,560,000
   b. 1,500,000
   c. 1,640,000
   d. 1,740,000

2. What is the cost of goods manufactured during the year?
   a. 2,040,000
   b. 1,860,000
   c. 1,940,000
   d. 1,800,000

3. What is the over or under application of overhead?
   a. P 60,000 over application
   b. P 140,000 under application
   c. P 40,000 under application
   d. P 160,000 over application

PROB. 7-16 (Adapted)

Carley Products has no work in process or finished goods inventories at the close of business on December 31. The balances of Carley's account as of December 31 are as follows:

Cost of goods sold	2,040,000
Selling and administrative expenses	900,000
Sales	3,600,000
Factory overhead control	700,000
Factory overhead applied	648,000

Carley Products' pretax income for the year is
a. 608,000
b. 660,000
c. 712,000
d. 52,000

PROB. 7-17 (AICPA)

In job order costing, when materials are returned to the storekeeper that were previously issued to the factory for cleaning supplies, the journal entry should be made to
a. Materials
   Factory overhead
b. Materials
   Work in process
c. Purchase returns
   Work in process
d. Factory overhead
   Work in process

PROB. 7-18 (AICPA)

Mason Co. uses a job order cost system and applies manufacturing overhead to jobs using a predetermined overhead rate based on direct labor pesos. The rate for the current year is 200% of direct labor pesos. This rate was calculated last December and will be used throughout the current year. Mason had one job, No. 150, in process on August with raw materials costs of P2,000 and direct labor costs of P3,000. During August, raw materials and direct labor added were as follows:

	No. 150	No. 151	No. 152
Raw materials	P -	P 4,000	P 1,000
Direct labor	1,500	5,000	2,500

Actual manufacturing overhead for the month of August was P20,000. During the month, Mason completed Job Nos. 150 and 151. For August, manufacturing overhead was

a. Overapplied by P4,000.
b. Underapplied by P7,000.
c. Underapplied by P2,000.
d. Underapplied by P1,000.

PROB. 7-19 (Adapted)

Baker Co. has two departments (Processing and Packaging) and uses a job order costing system. Baker applies overhead in Processing based on machine hours and on direct labor cost in Packaging. The following information is available for July:

	Processing	Packaging
Machine hours	2,500	1,000
Direct labor cost	P 44,500	P 23,000
Applied overhead	55,000	51,750

a. What is the overhead application rate per machine hour for Processing?
   a. 22.00
   b. 1.24
   c. 17.80
   d. 0.81

b. What is the overhead application rate for Packaging?
   a. 23.00
   b. 51.75
   c. 2.25
   d. 0.44

PROB. 7-20 (Adapted)

Zew Co. has a job order costing system and an overhead application rate of 120% of direct labor cost. Job #33 is charged with direct material of P12,000 and overhead of P7,200. Job #34 has direct material of P2,000 and direct labor of P9,000. What amount of direct labor cost has been charged to Job #33?

a. 6,000
b. 8,640
c. 7,200
d. 14,400

PROB. 7-21 (Adapted)

Queen Co. is a print shop, which produces jobs to customer specifications. During January, Job #123 was worked on and the following information is available:

Direct materials used	P	2,500
Direct labor hours worked		15
Machine time used		16
Direct labor rate per hour	P	7.00
Overhead application rate per machine hour	P	18.00

What was the total cost of Job #123 for January?

a. 3,025
b. 2,812
c. 2,770
d. 2,713

PROB. 7-22 (Adapted)

The Lotus Co. manufactures a specialty line of product using a job order costing system. During May, the following costs were incurred in completing Job #03: direct materials, P13,700; direct labor, P4,800; administrative, P1,400; and selling, P5,600. Factory overhead was applied at the rate of P25 per machine hour. Job #03 requires 800 machine hours. If Job #03 resulted in 7,000 good units, what is the cost of goods sold per unit?

a. 6.50
b. 6.30
c. 5.70
d. 5.50

PROB. 7-23 (RPCPA)

The factory ledger of the WTS Manufacturing Co. contains the following accounts:

Goods in process				
Materials	40,000	:	Finished goods	120,000
Labor	100,000	:		
Overhead	80,000	:		

The amount of materials charged to uncompleted job was P28,000.The amounts of labor and overhead charges for the uncompleted job are:

	Labor	Overhead
a.	40,000	32,000
b.	32,000	40,000
c.	72,000	40,000
d.	40,000	72,000

PROB. 7-24 (Adapted)

Job Spots Co. allocates overhead to jobs in process using the direct labor costs, raw material costs and machine hours. The overhead application rates for the current year are, as follows:

100% direct labor
20% of raw materials
P117 per machine hour

A particular production run incurred the following costs:

Direct labor	P	8,000
Raw materials		2,000

A total of 140 machine hours were required for the production run.

What is the total cost that would be charged to the production run?

a. 18,000
b. 18,400
c. 24,780
d. 34,780

PROB. 7-25 (AICPA)

Birk Co. uses a job order cost system. The following debits (credit) appeared in Birk's work in process account for the month of April:

April	Description	Amount
1	Balance	4,000
30	Direct materials	24,000
30	Direct manufacturing labor	16,000
30	Factory overhead	12,800
30	To finished goods	(48,000)

Birk applies overhead to production at a predetermined rate of 80% of direct manufacturing labor costs. Job No. 5, the only job still in process on April 30, has been charged with direct manufacturing labor of P2,000. What was the amount of direct materials charged to Job No. 5?

a. 3,000
b. 5,200
c. 8,800
d. 24,000

PROB. 7-26 (RPCPA)

The Irap Corp. Manufactures office tables and chairs, and accounts for cost using the job order costing system. The following data were taken from company records as of April 30. No Jobs were in process at the beginning of the month:

		Direct labor	
Job No.	Materials	No. of hours	Cost
121	P 2,160.00	650	P 800.00
122	4,575.00	1,850	3,625.00
123	5,637.50	4,100	7,162.50
124	1,612.50	750	1,400.00
125	3,250.00	1,600	3,050.00
126	1,375.00	490	825.00

In April, Job Nos. 121 and 122 were completed and sold for P4,500 and P10,000, respectively. Job Nos. 124 and 125 were likewise completed during the month. Manufacturing overhead costs are applied to jobs at P1.50 per direct labor hour. Actual manufacturing overhead cost for the month amounted to P15,175.

a. The cost of goods manufactured was
   a. 27,747.50
   b. 28,762.50
   c. 49,632.50
   d. 50,647.50

b. The gross margin on Job No. 122 was
   a. (950)
   b. (975)
   c. 565
   d. 1,800

PROB. 7-27 (AICPA)

Tillman Co. uses a job order cost system and has two production departments, M and A. Budgeted manufacturing costs for the year are

	Dept. M	Dept. A
Direct materials	700,000	100,000
Direct labor	200,000	800,000
Manufacturing overhead	600,000	400,000

The actual materials and labor costs charged to Job #123 during the year were as follows:

Direct materials		25,000
Direct labor:		
Dept. M	8,000	
Dept. A	12,000	20,000

Tillman applies manufacturing overhead to production orders on the basis of direct labor cost using separate departmental rates predetermined at the beginning of the year based on the annual budget. What is the total annual manufacturing cost associated with Job #123?

a. 50,000
b. 55,000
c. 65,000
d. 75,000

PROB. 7-28 (RPCPA)

National Marketing Corp. uses a job order costing system. It has three production departments, X, Y, and Z. The manufacturing cost budget for May is as follows:

	Dept. X	Dept. Y	Dept. Z
Direct materials	600,000	400,000	200,000
Direct labor	200,000	500,000	400,000
Manufacturing overhead	600,000	100,000	200,000

For Job No. 0198 which was completed in May, direct materials cost was P75,000 and direct labor cost was as follows:

Dept. X	40,000
Dept. Y	100,000
Dept. Z	20,000

The corporation applies manufacturing overhead to each job order on the basis of direct labor cost, using departmental rates predetermined at the beginning of the year based on the manufacturing cost budget. The total manufacturing cost of Job No. 0198 which was completed in May?

a. 235,000
b. 310,000
c. 385,000
d. 150,000

PROB. 7-29 (RPCPA)

The following information relates to Job No. 2468, which is being carried out by Flexy Feet to meet a customer's order:

	Dept. A	Dept. B
Direct materials consumed	P 5,000	P 3,000
Direct labor rate per hour	4	5
Production overhead per direct labor hour	4	4
Direct labor hours employed	400	200
Administrative and other overhead cost	20% of full production cost	
Profit markup	25% of selling price	

What is the selling price to the customer of Job No. 2468?

a. 16,250
b. 17,333
c. 19,800
d. 20,800

PROB. 7-30 (RPCPA)

Condotti Co.'s Job No. 205 for the manufacture of 6,600 coats was completed during August at the following unit costs:

Direct materials	1,500
Direct labor	1,000
Factory overhead (includes allowance of P50 for spoiled work)	500
	3,000

Final inspection of Job No. 205 disclosed 600 spoiled coats, which were sold to a jobber for P600,000. Assuming that spoilage loss is charged to all production, what would be the unit cost of the good coats produced on Job No. 205?

a. 2,900
b. 2,950
c. 3,000
d. 3,050

PROB. 7-31 (Adapted)

The Framers Co. manufactures picture frames and uses a job order costing system. The following costs relate to the current production run:

Estimated overhead (exclusive of spoilage)	160,000
Spoilage (estimated)	25,000
Sales value of spoiled frames	11,500
Labor hours	100,000

The actual cost of a spoiled frame is P7.00. During the period, 170 frames are spoiled. Each spoiled frame can be sold for P4.00. The spoilage is considered part of all jobs. What is the predetermined overhead rate per direct labor hour?

a. 1.85
b. 1.74
c. 1.60
d. 1.15

ANSWERS – Theory of Accounts

TOA 7-1 *Suggested answer (d) Sales commission determination*

A cost accounting system has numerous objectives, including product costing, assessing departmental efficiency, inventory valuation, income determination, planning, evaluating, and controlling operations. Determining sales commission is not an objective of a cost accounting system because it is based on sales, not costs.

TOA 7-2 *Suggested answer (d) Power*

A fixed cost is one that remains unchanged with the relevant range for a given period despite fluctuations in activity. Power costs are at least partially variable because they increase as usage increases.

TOA 7-3 *Suggested answer (c) The cost object to which the cost is being related.*

A direct cost can be specifically associated with a single cost object in an economically feasible way. An indirect cost cannot be specifically associated with a single cost object. Therefore, the specific cost object influences whether a cost is direct or indirect. For example, a cost might be directly associated with a single plant; and the same cost, however, might not be directly associated with a particular department in a plant.

TOA 7-4 *Suggested answer (d) Both product cost and prime cost*

Product costs are incurred to produce units of output and are deferred to future periods to the extent that output is not sold. Prime costs are defined as direct materials and direct labor. Thus, direct labor is both product cost and prime cost.

TOA 7-5 *Suggested answer (d) Sales value of product produced*

Under the traditional costing system, overhead is normally applied to production according to an allocation base such as direct labor hours, direct labor cost, or machine hours. An allocation base is an indirect measure, but it should have a relatively close correlation with the incurrence of overhead.

The sales value of the product produced is not a variable with a causal relationship to the incurrence of overhead.

TOA 7-6 *Suggested answer (d) Credit to cost of goods sold, finished goods, and work in process.*

Since cost of goods sold, work in process inventory, and finished goods inventory contain applied factory overhead, each of which should be adjusted by its proportionate share of over or underapplied overhead. Then entry to close overapplied overhead requires CREDIT to these three accounts; while to close underapplied overhead requires DEBIT to these three accounts.

TOA 7-7 *Suggested answer (b) Material requisitions*

Direct materials for a job are issued to the factory on the basis of materials requisitions, which are documents prepared by production schedulers or other personnel specifying the job number and type and quantity of materials required.

TOA 7-8 *Suggested answer (b) Machine hours*

Since overhead costs in an automated factory represent an ever larger part of product cost, it is appropriate to allocate factory overhead costs based on machine hours.

TOA 7-9 *Suggested answer (c) Insurance for production equipment expired*

A manufacturer's three product cost elements are direct materials, direct labor, and factory overhead. Any ***factory or production cost*** *that is indirect to the product or service and accordingly does not include direct materials and direct labor is overhead, and are allocated to cost objects.*

TOA 7-10 *Suggested answer (b) Factory overhead costs incurred were less than costs charged to production*

Debits to factory overhead control account reflect actual overhead cost incurred during the period, while credits reflect applied amounts. Because the debits and credits are seldom equal, there is usually a debit or credit balance in the account. A debit balance indicates that overhead has been underapplied; a credit balance means that overhead has been overapplied.

Thus, overapplied overhead is when applied overhead is in excess of actual overhead, because this results in a credit balance in the factory overhead control account.

TOA 7-11 *Suggested answer (d) Depends on the significance of the amount*

Overapplied or underapplied factory overhead should be disposed of at the end of an accounting period by transferring the balance either to cost of goods sold (if the amount is immaterial) or allocate this to cost of goods sold, finished goods inventory, and work in process inventory (if the amount is material). Theoretically, the allocation is preferred, but, because the amount is usually immaterial, the entire balance is often transferred directly to cost of goods sold. Thus, it depends on the significance of the amount.

TOA 7-12 *Suggested answer (c) Credit it to cost of goods sold*

When overhead is underapplied (debit balance), an insufficient amount of overhead was applied to production, on the other hand, overapplied overhead (credit balance) reflects the fact that too much overhead was applied to production. Disposition of underapplied or overapplied overhead depends on the materiality of the amount involved. When the amount is immaterial, the closing process of overapplied overhead causes cost of goods sold to decrease; however, when underapplied, closing overhead causes cost of goods sold to increase. Alternatively, if the amount of underapplied or overapplied overhead is significant, it should be allocated among the accounts containing overhead, such as: work in process inventory, finished goods inventory, and cost of goods sold.

Given a factory overhead control in the amount of P1,000, the amount is considered immaterial, thus, it is closed to cost of goods sold.

TOA 7-13 *Suggested answer (b) Normal capacity*

Normal capacity is the level of output that will approximate demand over a period of years that includes seasonal, cyclical, and trend variations. Deviations in one year will be offset in other years.

TOA 7-14 *Suggested answer (a) Overhead was composed chiefly of variable costs*

Unlike fixed cost, total variable overhead costs change in proportion to changes in the activity level. For the difference between actual and applied

overhead to be immaterial when actual production is substantially less than planned production. overhead costs must be composed chiefly of variable costs.

TOA 7-15 (Author) *Suggested answer: (b) Normal costing*

TOA 7-16 (Author) *Suggested answer: (c) Work in process, finished goods, cost of goods proportionately*

TOA 7-17 (Author) *Suggested answer: (b) Decrease in WP for the period*

TOA 7-18 (Author) *Suggested answer: (d) Employee benefit of factory worker*

TOA 7-19 (Author) *Suggested answer: (a) Insurance while in transit of the DM*

TOA 7-20 (Author) *Suggested answer: (d) Amortization cost of the patent covering a machinery used for production*

TOA 7-21 (Author) *Suggested answer: (b) Freight out, warranty cost and sales commission*

TOA 7-22 *Suggested answer (c)*

The flow of direct materials cost, direct labor cost, and manufacturing overhead cost in job order costing system ***parallels the physical flow of the materials as they are converted into finished goods****. Companies assigned manufacturing costs to the work in process inventory account. When a job is completed, the company transfers the cost of the job to finished goods inventory. Later, when the goods are sold, the company transfers their cost to cost of goods sold.*

TOA 7-23 *Suggested answer (a) Factory overhead analysis sheets*

Factory overhead analysis sheet is an overhead subsidiary record listing details of overhead costs.

TOA 7-24 *Suggested answer (c) Factory overhead control*

When factory overhead is incurred, factory overhead control is debited, and accounts payable or any appropriate account is credited. When factory overhead is applied, work in process is debited, and factory overhead applied is credited. Accordingly, the difference between the debited and credited amounts is recognized as over or underapplied overhead.

TOA 7-25 *Suggested answer (a) Work in process control*

The purchase of direct materials requires a debit to direct materials inventory. When direct materials are issued to production department, direct materials inventory account is credited and work in process control is debited.

TOA 7-26 *Suggested answer (d) Work in process control*

Direct labor costs are inventoriable costs, and initially debited to the work in process control account.

TOA 7-27 *Suggested answer (c) Work in process control*

The application of factory overhead is debited to work in process control and credited to factory overhead applied or factory overhead control using a predetermined overhead rate. The effect is to increase the work in process control account.

TOA 7-28 *Suggested answer (d) Completed during the period*

The journal entry to transfer inventory from work in process to finished goods is to debit finished goods and credit work in process. The amount of the entry is the sum of the costs, irrespective of the period in which they are incurred, charged to all jobs completed during the period.

TOA 7-29 *Suggested answer (b) Customer's requirement for early completion of the job.*

A direct labor overtime premium is ordinarily considered an indirect cost, charged to factory overhead and allocated to all jobs. However, if overtime

directly results from the demands of a specific job, it is a direct cost of that job.

TOA 7-30 *Suggested answer (d) The overtime hours times the overtime premium would be charged to manufacturing overhead, and the overtime hours times the straight-time wages would be treated as direct labor.*

Direct labor costs are wages paid to labor that can feasibly be specifically identified with the production of finished goods. Factory overhead consists of all costs, other than direct materials and direct labor, that are associated with the manufacturing process. Thus, straight-time wages would be treated as direct labor; however, the overtime hours times the overtime premium should be charged to manufacturing overhead, because the overtime premium cost is a cost that should be borne by all production.

TOA 7-31 *Suggested answer (a) Direct labor*

Employer taxes on factory payroll and fringe benefits paid to factory employees are treated as direct labor costs. The justification is that payroll taxes and fringe benefits are necessary to obtain such labor.

TOA 7-32 *Suggested answer (c) Yes, Yes*

Factory overhead consists of indirect manufacturing costs that cannot feasibly be traced to specific units but are necessarily incurred as part of production process. Factory overhead, in a traditional cost system, is usually allocated to products based upon some indirect measures (e.g. direct labor hours or machine hours).

TOA 7-33 *Suggested answer (c) Direct labor cost*

In service businesses, direct labor and labor-related costs are usually larger than any other cost, often by wide margin, so the predetermined overhead rate typically is based on direct labor cost.

TOA 7-34 *Suggested answer (a) both labor and overhead cost*

In service businesses, it is common to combine labor cost with the predetermined overhead rate, so the amount charged to a job for each hour of direct labor represents both labor and overhead.

TOA 7-35 *Suggested answer (a) The loan department of a bank*

Many service businesses (e.g. banks, professional services, etc.) call for job order costing. Direct materials are often insignificant, and direct labor makes up most of the cost of each job. Overhead is typically allocated as a percentage of labor cost, so single cost rate may be used for the sum of labor and overhead.

TOA 7-36 *Suggested answer (c) Less than expected. Greater than expected.*

Underapplied overhead will result if too little overhead is applied at the predetermined rate. If the actual and expected fixed costs are the same, but the actual volume is less than the expected volume, overhead will be underapplied. If the actual volume equals expected volume, but actual fixed costs exceed the expected fixed costs, overhead is likewise underapplied.

TOA 7-37 *Suggested answer (a) A job order costing system*

Job order costing system are designed to accumulate costs for tasks or projects that are unique and non-repetitive. Service organizations are interested in identifying the costs applicable to each customer and/or each service call.

TOA 7-38 *Suggested answer (d) The nature and amount of the product or service brought to the market place for customer consumption.*

Job order costing identifies costs to specific units, lots, or batches. It is appropriate when products or services have unique characteristics, such as custom-made products or services.

Process costing is used when masses of identical or similar units of products or services are provided for general consumer use.

TOA 7-39 *Suggested answer (a) Costs are assigned to production runs and the number of units for which costs are averaged.*

A cost system determines the manufacturing cost to be expensed when the product is sold, and the portion to be deferred when the product is still on hand. The difference is that the job order costing simply requires subsidiary ledgers to keep track of the specific jobs for the same work in process and finished goods accounts that are basic to process costing.

TOA 7-40 (Author) *Suggested answer: (c) Closed to factory overhead*

TOA 7-41 (Author) *Suggested answer: (b) Charged or capitalized to that particular job*

SOLUTIONS – Problems

PROB. 7-1 *Suggested answer (b) P190,000*

Once the cost object is selected, measurement of costs depends heavily on the traceability of costs to the cost object. The traceability of costs to a cost object varies by degree. A common way of characterizing costs is to label them as either direct or indirect costs of a particular cost object, as if there were only two degrees of traceability.

At the extreme of directly traceable costs are those items that can be physically or contractually identified as components of the finished goods. Near that extreme are the costs that can be empirically traced to the unit's production by observing the production process. Of course, not all items that are physically or empirically traceable to a unit will be important enough to justify the effort required to trace and record them. Whether the tracing is justified depends on how precise a measure of direct costs is needed and how difficult or costly the tracing will be. For that reason, cost accounting system generally treat as direct costs only some of the cost items that could conceivably be traced directly to the product.

Therefore, the amount of cost that could be traced to specific products in the production process should be the total costs of direct materials and direct labor in the amount of P190,000 (P100,000 + 90,000).

PROB. 7-2 *Suggested answer (d) P120,000*

Direct manufacturing labor costs include all labor costs which can be directly traced to the product in an economically feasible way; and all other factory labor is considered indirect manufacturing labor. Thus, the amount of direct manufacturing labor is the wages of loom operators; while the labor cost of factory foreman and machine mechanics are indirect manufacturing labor.

PROB. 7-3 *Suggested answer (b) 400,000*

Direct materials are all materials that form an integral part of the finished product and that are included explicitly in calculating the cost of the product.

The ease with which the materials items can be traced to the final product is a major consideration in classifying items as direct materials, thus in case of aluminum fastener makers, the cost of aluminum in the amount of P400,000 is considered as direct materials. Machine parts and lubricants for machines are classified as indirect materials.

PROB. 7-4 *Suggested answer (b) P1,362,500*

Direct labor	750,000
Factory overhead:	
Indirect materials	125,000
Indirect labor	112,500
Other factory overhead	375,000
Conversion costs	1,362,500

Again, conversion cost is the sum of direct labor and factory overhead.

PROB. 7-5 *Suggested answer (c) 900,000*

			Allocation
Direct labor	100%	1/3	600,000
Factory overhead	200%	2/3	1,200,000
	300%		1,800,000
Total prime costs			1,500,000
Less direct labor cost			600,000
Direct materials cost			900,000

Prime cost is the sum of direct materials and direct labor costs. Conversion cost is the sum of direct labor and factory overhead costs.

PROB. 7-6 *Suggested answer (b) P692,306*

Work in process				
Opening inventory	88,125	:	Closing inventory	67,500
Direct materials	164,250	:	Cost of goods	
Direct labor	225,525	:	Manufactured	692,306
Factory overhead	281,906	:		
Total	759,806	:	Total	759,806

The best approach to locate a missing item is through the use of "T" account.

PROB. 7-7 *Suggested answer (b) P30,000*

Indirect materials	5,000
Indirect labor (45,000 – 40,000)	5,000
Other factory overhead	20,000
Total factory overhead	30,000

Factory overhead consists of all cost, other than direct materials and direct labor, that are associated with the manufacturing process. It includes both fixed and variable costs. Therefore, factory overhead control account should have a total overhead in the amount of P30,000.

PROB. 7-8

a. *Suggested answer (d) P150,000*

Direct materials used (P36,000 + 84,000 - 30,000)	90,000
Direct manufacturing labor	60,000
Prime cost	150,000

Prime cost is the sum of direct materials used (all materials that form an integral part of the finished product and are included explicitly in calculating the cost of the product) and direct manufacturing labor (labor that converts direct materials into finished product and can be assigned feasibly to a specific product).

b. *Suggested answer (b) P140,000*

Direct manufacturing labor	60,000
Factory overhead (applied) (P60,000/ 7.50 x 10.00)	80,000
Conversion cost	140,000

Conversion cost is the sum of direct manufacturing labor and applied factory overhead. Factory overhead consists of all manufacturing cost not traced directly to specific output. Simply stated, factory overhead includes all

manufacturing costs except direct materials and direct labor. Because of impossibility of tracing overhead to specific products, overhead is allocated to products.

A predetermined overhead rate permits a consistent and logical allocation to each unit of output. In job order costing, actual costs of direct materials and direct labor used on a job are determined from materials requisition and time cards are entered on job order cost sheets.

c. *Suggested answer (d) P236,000*

Direct materials used	90,000
Direct manufacturing labor	60,000
Factory overhead applied	80,000
Manufacturing costs	230,000
Add work in process, beginning	18,000
Total goods placed in process	248,000
Less work in process, end	12,000
Cost of goods manufactured	236,000

Cost of goods manufactured is the cost of the goods completed and transferred to finished goods. It is the total manufacturing costs adjusted by work in process inventory.

PROB. 7-9 *Suggested answer (a) P950,000*

Raw materials used:		
Raw materials purchased	430,000	
Less increase in raw materials inventory	15,000	415,000
Direct manufacturing labor payroll		200,000
Factory overhead		300,000
Total manufacturing costs/ Cost of goods manufactured		915,000
Add decrease in finished goods inventory		35,000
Cost of goods sold		950,000

In manufacturing concern, total operating cost consists of two elements: Manufacturing cost and Commercial cost. Manufacturing costs also called production cost or factory cost is usually defined as the sum of three cost elements: direct materials, direct labor, and factory overhead. While,

commercial costs/expenses fall into two large classifications: marketing and administrative expenses.

The increase in raw materials inventory represents the amount of the raw materials purchased but was not used, thus, deducted. The decrease in finished goods inventory represents the amount of inventory that was sold in excess of inventory manufactured during the period, thus added to cost of goods manufactured for purposes of determining the cost of goods sold. Freight out is a period cost and should not be including in computing the cost of goods sold. Ordinarily, the total costs of direct materials, direct labor and factory overhead is the manufacturing costs, however based on the foregoing information where there is no work in process at the beginning or end of the year, the total manufacturing costs is equal to cost of goods manufactured.

PROB. 7-10 *Suggested answer (c) P187.50*

Fabricating (7.75 x 19,000)	147,250.00
Spreading (15.10 x 27,500)	415,250.00
Gossiping (2.125 x 5,500)	11,687.50
Total applied factory overhead	574,187.50
Less total actual factory overhead	574,375.00
Underapplied factory overhead	187.50

If the applied factory overhead is more than the actual factory overhead, it is said to be overapplied; conversely, it is underapplied when the applied overhead is less than actual overhead. The over or underapplied factory overhead can be either treated as a period cost, or allocated between inventories and the cost of goods sold. If the amount is insignificant, it should be closed directly to income summary account or to cost of goods sold as a period cost.

PROB. 7-11 *Suggested answer (a) P2,250*

Overhead rate per direct labor hour (255,000/100,000)	2.55
Applied overhead (105,000 x 2.55)	267,750
Less Actual overhead	265,500
Overapplied overhead	2,250

Normally, at the end of the year, actual overhead will not equal applied overhead. The difference between these two figures is referred to as underapplied or overapplied overhead. Underapplied overhead means that the amount of overhead applied to work in process inventory is ***less*** *than actual overhead. Overapplied overhead measn that the amount of applied overhead to work in process is* ***greater*** *than actual overhead. Accordingly, overapplied or underapplied overhead must be closed at year-end because the time frame used to determine the overhead rates was one year.*

PROB. 7-12 *Suggested answer (a) Overapplied by P20,000*

Overhead rate per direct labor hour (720,000/600,000)	1.20
Applied overhead (1.20 x 650,000)	780,000
Less Actual overhead	760,000
Overapplied overhead	20,000

Determining the amount of overhead to be charged is more difficult. To overcome the difficulties of overhead accounting, all overhead costs are distributed over all jobs. Some overhead costs are not measured until year-end. Long after many jobs are completed. For that reason, actual overhead cannot be charged to jobs in a timely fashion, thus estimates are necessary. To permit timely application of overhead, a predetermined overhead rate is used, which, under the traditional costing system, is based on direct labor.

PROB. 7-13 *Suggested answer (c) P757,500*

Cost of goods sold	720,000	720/864	37,500.00
Work in process	54,000	54/864	2,812.50
Finished goods	90,000	90/864	4,687.50
Total	864,000		45,000.00

Disposition of underapplied or overapplied overhead depends on the materiality of the amount involved. When the amount is immaterial, the closing process of overapplied overhead causes cost of goods sold to decrease; however, when underapplied, closing overhead causes cost of goods sold to increase. Alternatively, if the amount of underapplied or

overapplied overhead is significant, it should be allocated on pro rata basis among the accounts containing overhead, such as: work in process inventory, finished goods inventory, and cost of goods sold. Since overhead is underapplied, cost of goods sold should be reported at P757,500 (P720,000 + 37,500)

PROB. 7-14 *Suggested answer (c) P974,000*

Cost of goods sold	980,000
Less overapplied overhead	6,000
Cost of goods sold, balance	974,000

The most common treatment of over or underapplied overhead is to close this to cost of goods sold, moreover if the amount is immaterial. When the amount is immaterial, the closing process of overapplied overhead causes cost of goods sold to decrease.

PROB. 7-15 (Author)

1. *Suggested answer: (a) 1,560,000*

Raw materials inventory, beginning	200,000
Add net purchases of raw materials	500,000
Total	700,000
Less raw materials inventory, ending	300,000
Raw materials used	400,000
Less indirect materials used (400,000 x ¼)	100,000
Direct materials used	300,000
Direct labor costs (800,000 x 7/8)	700,000
Add applied factory overhead (700,000 x 80%)	560,000
Total manufacturing costs	1,560,000

2. *Suggested answer: (b) 1,860,000*

Total manufacturing costs	1,560,000
Add work in process inventory, beginning	500,000
Total	2,060,000
Less work in process inventory, end	200,000
Total costs of goods manufactured	1,860,000

3. *Suggested answer: (c) 40,000 under application*

Indirect materials used (400,000 x ¼)	100,000
Indirect labor costs (800,000 x 1/8)	100,000
Depreciation of factory assets	100,000
Utilities on the factory during the year	300,000
Actual factory overhead during the year	600,000
Less applied factory overhead (700,000 x 80%)	560,000
Under application of factory overhead	40,000

PROB. 7-16 *Suggested answer (a) P608,000*

Underapplied overhead (648,000 – 700,000)	52,000
Sales	3,600,000
Cost of goods sold (2,040,000 + 52,000)	2,092,000
Gross profit	1,508,000
Less selling and administrative expenses	900,000
Pretax income	608,000

The application of factory overhead is debited to work in process control and credited to factory overhead applied or factory overhead control using a predetermined overhead rate. Disposition of underapplied or overapplied overhead depends on the materiality of the amount involved. If the amount of underapplied or overapplied overhead is significant, it should be allocated on pro rata basis among the accounts containing overhead, such as: work in process inventory, finished goods inventory, and cost of goods sold. Given this information with no work in process or finished goods, over or underapplied overhead may be closed to cost of goods sold, where the

closing process of underapplied overhead causes cost of goods sold to increase.

PROB. 7-17 *Suggested answer (a) Debit: Materials Credit: Factory overhead*

If the raw material inventory account contains indirect material, the costs of these issuance are assigned to manufacturing overhead. When these materials are subsequently returned to the storekeeper, the original journal entry is reversed.

PROB. 7-18 *Suggested answer (c) Underapplied by P2,000.*

Total direct labor costs (1,500 + 5,000 + 2,500)	9,000
Applied overhead (200% x 9,000)	18,000
Less Actual overhead	20,000
Underapplied overhead	2,000

Note that the predetermined overhead rate is based on direct labor costs. Since applied overhead is less than actual overhead, then overhead is underapplied by P2,000.

PROB. 7-19

a. *Suggested answer (a) P22.00*

Overhead rate per machine hour (P55,000/2,500)	22.00

Applied overhead is the amount of overhead assigned to Work in Process Inventory as a result of the activity that was used to develop the application rate. Application is made using the predetermined rates and actual level of activity. If the basis is machine hours, then the applied overhead should be divided by machine hours.

b. *Suggested answer (c) P2.25*

Overhead rate per direct labor cost (P51,750/23,000)	2.25

Given that overhead is applied based on direct labor cost in Packaging department, then applied overhead should be divided by that basis, that is the direct labor cost.

PROB. 7-20 *Suggested answer (a) P6,000*

Direct labor cost (P7,200/120%)	6,000

Given that the overhead rate is 120% of direct labor cost, therefore, direct labor cost is at 100%.

PROB. 7-21 *Suggested answer (d) P2,713.*

Direct materials		2,500
Direct labor (7 x 15)	105	
Factory overhead (18 x 6)	108	213
Total cost of Job #123		2,713

A manufacturer's three product cost elements are direct materials, direct labor, and factory overhead. Factory overhead consists of indirect manufacturing costs that cannot feasibly be traced to specific units but are necessarily incurred as part of production process. Factory overhead, in a traditional cost system, is usually allocated to products based upon some indirect measures (e.g. direct labor hours or machine hours).

PROB. 7-22 *Suggested answer (d) 5.50*

Direct materials	13,700
Direct labor	4,800
Applied overhead (25 x 800)	20,000
Total manufacturing costs	38,500
Divide by good units	7,000
Cost of goods sold per unit	5.50

Note that factory overhead is applied based on machine hours.

PROB. 7-23 *Suggested answer (a) P40,000 P32,000*

Total costs charged to uncompleted job			100,000
Less direct materials used			28,000
Conversion costs			72,000
			Allocation
Direct labor	100,000	100/180	40,000
Factory overhead	80,000	80/180	32,000
	180,000		72,000

Some overhead costs are not measured until year-end, long after many jobs are completed. For that reason, actual overhead cannot be charged to jobs in a timely fashion, estimates are needed. To permit timely application of overhead, a predetermined rate is used. And the amount charged to a job is called applied overhead. In principle, it is normal to determine a casual relationship between two factors, such as the direct labor and factory overhead, and uses this relationship as the means of charging factory overhead to jobs.

PROB. 7-24 *Suggested answer (d) 34,780*

Direct labor		8,000
Raw materials		2,000
Overhead:		
100% x P8,000 of direct labor	8,000	
20% x P2,000 of raw materials	400	
P117 x 140 machine hours	16,380	24,780
		34,780

The total cost that would be charged to production run consists of materials, direct labor, and applied factory overhead. Note that the company allocates overhead to jobs using direct labor costs, raw material costs and machine hours.

PROB. 7-25 *Suggested answer (b) P5,200*

Work in process				
Beg. balance	4,000	:	Ending balance	8,800
Direct materials	24,000	:	To finished goods	48,000
Direct labor	16,000	:		
Overhead	12,800	:		
Total	56,800	:	Total	56,800

Direct manufacturing labor	2,000
Factory overhead (2,000 x 80%)	1,600
Direct materials (squeeze)	5,200
Total cost of Job No. 5	8,800

In job order costing, production costs (direct materials, direct labor and factory overhead) are accumulated for each separate job, which is the output identified to fill a certain customer order or to replenish an item of stock on hand. A job's prime costs are determined from materials requisitions and time tickets. Some overhead costs are not measured until year-end, long after many jobs are completed. For that reason, actual overhead cannot be charged to jobs in a timely fashion; estimates are needed. To permit timely application of overhead, a predetermined overhead rate is used, generally, the ratio of estimated total overhead to the estimated total of the overhead allocation base. Since the only job still in process at the end of the period is Job No. 5, the costs of ending work in process in the amount of P8,800 pertains to this job, which is composed of direct manufacturing labor of P2,000; factory overhead of P1,600; and direct materials of P5,200, as shown above.

PROB. 7-26

a. *Suggested answer (a) P27,747.50*

Completed Jobs	Materials	Cost	Applied overhead	Total
121	2,160.00	800.00	975.00	3,935.00
122	4,575.00	3,625.00	2,775.00	10,975.00
124	1,612.50	1,400.00	1,125.00	4,137.50
125	3,250.00	3,050.00	2,400.00	8,700.00
Total	11,597.50	8,875.00	7,275.00	27,747.50

The requirement is to determine the cost of goods manufactured. Therefore, since job order costing accumulates the costs of direct materials, direct labor, and factory overhead charged to each job, what is to be computed is the total production costs of the completed jobs (Job Nos. 121, 122, 124, and 125), as shown above. It should be noted that factory overhead applied to jobs is P1.50 per direct labor hour, thus the number of direct labor hours corresponding to each job must be multiplied by this predetermined rate.

b. *Suggested answer* (b) (975)

Selling price of Job No. 122	10,000
Less production cost of Job No. 122 "a"	10,975
Gross loss	(975)

Since the total production cost of Job No. 122, as shown in "a", is more than its selling price, the difference should be treated as gross loss.

PROB. 7-27 *Suggested answer (d) 75,000*

Overhead rates:		
Dept. M (600,000/200,000)	300% of direct labor cost	
Dept. A (400,000/800,000)	50% of direct labor cost	
Direct material cost		25,000
Direct labor cost		20,000
Factory overhead applied:		
Dept. M (300% x 8,000)		24,000
Dept. A (50% x 12,000)		6,000
Total manufacturing costs		75,000

Total manufacturing costs consist of direct materials, direct labor, and manufacturing overhead. Direct materials and direct labor are given in the problem; overhead rates are to be determined for each department. Department rates are calculated by dividing departmental manufacturing overhead by direct labor costs.

PROB. 7-28 *Suggested answer (c) P385,000*

Direct materials cost		75,000
Direct labor cost:		
Dept. X	40,000	
Dept. Y	100,000	
Dept. Z	20,000	160,000

Applied overhead:		
Dept. X (P600,000/200,000 x 40,000)	120,000	
Dept. Y (P100,000/500,000 x 100,000)	20,000	
Dept. Z (P200,000/400,000 x 20,000)	10,000	150,000
Total cost of Job No. 01-98		385,000

To overcome the difficulties of overhead accounting, all overhead costs are distributed over all jobs. The amount charged is in proportion to an activity such as: direct labor usage, machine usage, processing time, material usage, or a combination of two or more of these. In the aforementioned data, the applied overhead was based on the direct labor cost, using departmental rates predetermined at the beginning of the year based on the manufacturing cost budget.

PROB. 7-29 *Suggested answer (d) P20,800*

Direct materials used (P5,000 + 3,000)	8,000
Direct labor [(400 x 4) + (200 x 5)]	2,600
Overhead costs [(400 x 4) + (200 x 4)]	2,400
Total production costs	13,000
Administrative and other overhead costs (13,000 x 20%)	2,600
Total costs and expenses, Job No. 2468	15,600
Divide by ratio of cost to sales (100% - 25%)	75%
Selling price of Job No. 2468	20,800

Regardless of the number of departments that processed the product, the total production costs plus profit mark up must be considered for purposes of computing the selling price of a completed job.

PROB. 7- 30 *Suggested answer (c) P3,000*

Spoiled goods differ from scrap in that they are partially or fully completed units that are defective in some way. spoiled goods are not correctable either because technically it is not possible to correct them or because it is not economical to correct them. Spoilage can be caused by some action taken by the customer or because of internal failure.

If spoilage occurs because of some action taken by the customer, it should be regarded as a cost of quality. The customer should pay for this kind of spoilage. The unrecovered cost of the spoiled goods should be charged to the job (the salvage value of the spoiled goods should be removed from the job, but all costs in excess of the salvage value should remain on the job and be charged to the customer).

If spoilage occurs because of internal failure, the unrecovered cost of the spoiled goods should be charged to factory overhead. If the cost of spoilage is of magnitude large enough to distort reported production costs, it should be reported separately as a loss on the income statement. If the spoiled goods have a salvage value, they should be inventoried at the salvage value, and the unrecoverable cost of the spoiled goods (the cost incurred to produce the spoiled goods in excess of the salvage value) should be charged to factory overhead control account.

However, based on the foregoing information, where specifically mentioned that spoilage loss is charged to all production, the cost of good units produced would be the total cost per unit of P3,000, wherein an allowance for spoiled work was included in the factory overhead account.

PROB. 7-31 *Suggested answer (b) 1.74*

Total overhead including spoilage (160,000 + 25,000)	185,000
Less sales value of spoiled frames	11,500
Balance	173,500
Divide by direct labor hours	100,000
Overhead rate per direct labor hour	1.74

When spoilage is attributable to general factory conditions, the unrecoverable cost of the spoiled goods should be charged to Factory Overhead Control. If the spoiled goods have a salvage value, they should be inventoried at the salvage value, and the related cost in excess of the salvage value should be charged to Factory Overhead Control account. To the extent that spoilage can be predicted but not eliminated, the predetermined factory overhead should be adjusted to reflect the increased cost of overhead. Before the predetermined overhead rate is computed, the unrecoverable cost of the spoiled goods should be estimated and included in total budgeted factory overhead for the period.

Chapter 8

PROCESS COSTING

Introduction

In contrast to job order costing, when all units of product manufactured within a cost center are homogenous (that is essentially similar), keeping tract of the cost of separate batches of product is not necessary. In a process cost system, materials, labor and overhead are charged to cost centers. The cost assigned to each unit is determined by dividing the total cost charged to the cost center by the number of units produced. Cost centers are usually departments but may be processing centers within departments.

EQUIVALENT UNITS OF PRODUCTION (EUP)

Determining the cost of the units transferred out of a department and those remaining in ending inventory are essentially an allocation process. Since costs can change over time, a cost flow assumption must be adopted. And since units of product in ending inventories usually are not fully completed, the number of equivalent units must be computed for each cost element (materials, labor, and overhead). Equivalent unit is the amount of a resource that is required to complete one unit of product with respect to the cost elements being considered. Equivalent units of production are an approximation of the number of whole units of output that could have been produced during a period from the actual effort expended during that period. These are calculated by multiplying the number of actual but incomplete units produced by the respective percentage degree of completion.

The two primary equivalent units of production methods used for process costing are the following:

Average Method

This method combines the units in process at the beginning of the period with the current period production. The total unit to account for is equal to the total number of whole and partial units worked during the current period: beginning

inventory plus units started. Therefore, when accounted, it is composed of completed and transferred and partially completed and remaining in process at the end of the period, as shown below:

Completed and transferred (whole units)
+ Work in process – end (EUP)
Average EUP

Note: The work in process – beginning and units started during the period are included in the above computation as the total units to be accounted.

FIFO Method

Under this method, the first units transferred out of the department are deemed to come from beginning inventory. This method separates the units in process at the beginning of the period with the current period production. In order to compute the number of equivalent units of current period cost required to complete the units in beginning inventory, the stage of completion of the units in beginning inventory must be known. Unlike FIFO, the average method includes the EUP in work in process – beginning; thus, to convert from average to FIFO, simply deduct the EUP in work in process – beginning, as shown below:

Average EUP
- Work in process – beginning
FIFO EUP

COST ANALYSIS

In process costing, all cost chargeable to a department is summarized in a departmental cost of production report. It shows the total and unit costs of work received from one or more departments; total and unit costs of materials, labor, and factory overhead added by the department; the cost of the beginning and ending work in process inventories; and the cost transferred to a succeeding department or to finished goods.

The following are the two methods of accounting for cost flow in process costing:

Average Method

Under this method, the average cost per equivalent unit for each element of cost is determined by dividing the total cost for each element of cost (the amount in beginning inventory plus the amount added during the current period) by the number of equivalent units required to allocate that cost between the units transferred out of the department and units in ending inventory.

FIFO Method

Under this method, as the cost of the first units transferred out of the department are deemed to come from beginning inventory, the units to be accounted for contains only current period costs. Consequently, equivalent units are computed for current period costs only. Thus, using this method, the cost per equivalent unit for each element of cost is determined by dividing the total cost incurred in the current period by the equivalent units of production.

ACCOUNTING FOR PRODUCTION LOSSES – PROCESS COSTING

Few, if any, process combine material, labor, and overhead with no loss of units. Errors in the production process (either by human or machines) cause a loss of units through rejection at inspection for failure to meet appropriate quality standards or designated product specifications. Production losses and spoilage may result from continuous processing of a product. Units are lost through evaporation, shrinkage, or spoiled works. Lost units reduce the number of units over which total cost can be spread, and cause an increase in unit costs.

Loss Units

Accounting for lost units requires to identify the loss as being, either normal or abnormal, and specify as being either continuous or discrete. Thus, a normal loss may either continuous or discrete; and an abnormal loss may either continuous or discrete.

- **Normal Loss**

  A normal loss of units falls within a tolerance level expected during the production. The range of tolerance specified by management creates the Accepted Quality Level (AQL). Normal loss cost is considered a product cost and is included as part of cost of the *good units* resulting from the process. Thus, the cost of the loss is inventoried and expensed only when good units are sold.

- **Abnormal Loss**

  Abnormal loss is a loss in excess of the normal, predicted tolerance limits. Thus, when an abnormal loss occurs, so does a normal loss (unless zero defects have been set as Accepted Quality Level (AQL). The cost of abnormal losses should be accumulated and treated as a loss in the period in which those losses occurred.

- **Continuous Loss**

  Continuous loss is a loss that is assumed to occur uniformly throughout the production process. Continuous loss may be normal or abnormal. It is always accounted for on an equivalent unit basis.

- **Discrete Loss**

  Discrete loss is a loss that occurs at a specific point in the production process. These units are deemed lost and unacceptable when a quality check is performed, which is at inspection point. Similar with continuous loss, discrete loss may be normal or abnormal. It is always accounted for on an equivalent unit basis.

A *normal loss is continuous* when it is within a tolerance level expected during production and occurs uniformly throughout the production process. Accordingly, a *normal loss is discrete* when it is within a tolerance level expected during production and assumed to occur at a specific point, that is, the inspection point.

On the other hand, an *abnormal loss is continuous* when it is in excess of the normal predicted tolerance limits and occurs uniformly throughout the production process.

And, an *abnormal loss is discrete* when it is in excess of the normal predicted tolerance limits and assumed to occur at a specific point (inspection point).

The following types of production losses with corresponding cost accounting principles are deemed necessary, in the computation of EUP, cost and absorbing lost units, when losses were discovered at the start, during, or end of the production process.

Normal Continuous

- Not included in the computation of EUP. (The method of neglect simply excludes the spoiled units in the computation of EUP. However, it is included in the computation of EUP when discovered at the end of production, because it is already completed when discovered.)
- Product cost.
- The cost is absorbed by all good units (Work in Process – End and transferred out units).

Note: By not including the lost units in the computation of EUP, as product cost, the corresponding cost of lost units are absorbed by all good units.

Normal Discrete

- Included in the computation of EUP based on the degree of completion at inspection point. (Discrete losses occur at specific point, that is, the inspection point.)
- Product cost.
- If the ending inventory has not yet passed an inspection point, the cost of lost units is assigned only to the good units transferred out.
- If the ending inventory has passed an inspection point, the cost of the lost units is allocated to all good units (Work in Process – End and transferred out units).

Note: If the inspection point is not identified, lost units in this category are not included in the computation of EUP.

Abnormal Continuous

- Included in the computation of EUP, except when discovered at the start of the process, where they are removed from the process.
- Period cost.
- Written off as a loss.

Abnormal Discrete

- Included in the computation of EUP based on the degree of completion at inspection point, except when discovered at the start of the process, where they are removed from the process.

Note: The cost of lost units is written off as a loss and therefore, not absorbed by any good units. Abnormal loss cost is always accounted for on an equivalent unit basis.

- Period cost.
- Written off as a loss.

Note: The cost of lost units is written off as a loss and therefore, not absorbed by any good units.

The following presentation shows the application of the above cost accounting principles when production losses are discovered at the start; during, or end of the production process:

EUP:

	Normal Loss	Abnormal Loss
Start	Zero (Method of neglect)	Zero (Spoiled units are removed from the process)
During	Zero (Inspection point is not identified; thus, continuous loss)	Degree of completion at inspection point.
End	100% (At the end of the process, units are already completed)	100% (At the end of the process, units are already completed)

Cost:

First Department:

	Normal Loss	Abnormal Loss
Start	No cost yet of lost units	No cost yet of lost units
During	No cost yet of lost units	EUP of lost units *times* unit cost of this department.
End	EUP of lost units *times* unit cost of this department.	EUP of lost units *times* unit cost of this department.

Subsequent Department:

	Normal Loss	Abnormal Loss
Start	Lost units *times* unit cost of preceding department	Lost units *times* unit cost of preceding department
During	Lost units *times* unit cost of preceding department	(Lost units *times* unit cost of preceding department) *plus* (EUP of lost units *times* unit cost of this department)
End	(Lost units *times* unit cost of preceding department) *plus* (EUP of lost units *times* unit cost of this department)	(Lost units *times* unit cost of preceding department) *plus* (EUP of lost units *times* unit cost of this department)

Allocation of Cost – Normal Loss

It has been discussed in the preceding section that the cost of normal loss/spoilage, as product cost, will be absorbed by all good units. The allocation procedure between the Work in Process at the end of the period and transferred out units depends on the inventory method used: FIFO and Average.

Normal Continuous

	FIFO	Average
Start/ During	Allocated to all good units started and completed, and Work in Process at the end of the period.	Allocated to all good units completed and Work in Process at the end of the period.
End	Allocated to all units completed and transferred out.	Allocated to all good units transferred out and Work in Process at the end of the period.

Normal Discrete

- If the ending inventory has not yet passed an inspection point, the cost of lost units is assigned only to the good units transferred out.
- If the ending inventory has passed an inspection point, the cost of the lost units is allocated to Work in Process at the end of the period and transferred out units, under the following inventory methods:

FIFO	Average
Based on the current costs contained in each category before allocation.	Based on the total costs contained in each category before allocation.

MULTIPLE CHOICE – Theory of Accounts

TOA 8-1 (Adapted)

Which of the following alternatives correctly classifies the business application to the appropriate costing system?

	Job order costing System	Process costing System
a.	Wallpaper manufacturer	Oil refinery
b.	Aircraft assembly	Public accounting firm
c.	Paint manufacturer	Retail banking
d.	Print shop	Beverage drink manufacrturer

TOA 8-2 (Adapted)

Indicate which of the following statements is not correct?

a. Both a job order and a process cost system track the same three manufacturing cost elements – direct materials, direct labor, and manufacturing overhead.
b. A job order cost system uses only one work in process account, whereas a process cost system uses multiple work in process accounts.
c. Manufacturing costs are accumulated the same way in a job order and in a process cost system.
d. Manufacturing costs are assigned the same way in a job order and in a process cost system.

TOA 8-3 (AICPA)

Which of the following characteristics applies to process costing but not to job order costing?

a. Identifiable batches of production.
b. Equivalent units of production.
c. Averaging process.
d. Use of standard costs.

TOA 8-4 (Adapted)

3D Laboratory develops films using a four-step process that moves progressively through four departments. The company specializes in overnight service and has the largest drug store chain as its primary customer. Currently, direct labor, direct

materials, and overhead are accumulated by department. The cost accumulation system that best describes the system 3D Laboratory is using is

a. Operation costing
b. Activity-based costing
c. Job order costing
d. Process costing

TOA 8-5 (Adapted)

Which cost accumulation procedure is most applicable in continuous mass production manufacturing environments?

a. Standard
b. Actual
c. Process
d. Job order

TOA 8-6 (Adapted)

Which of the following is not a characteristic of a process cost system?

a. Once production begins, it continues until the finished product emerges.
b. The products produced are heterogeneous in nature.
c. The focus is on continually producing homogeneous products.
d. When the finished product emerges, all units have precisely the same amount of materials, labor, and overhead.

TOA 8-7 (Adapted)

The product flow format where certain portions of the work are done simultaneously and then brought together for completion is called

a. Applied
b. Parallel
c. Standard
d. Sequential

TOA 8-8 (AICPA)

A true process costing system could make use of each of the following except

a. Standard costs
b. Individual lots
c. Variable costing
d. Responsibility accounting

TOA 8-9 (Adapted)

The best approach to quality improvement is to concentrate on
a. Prevention
b. Detection
c. Appraisal
d. Increased production

TOA 8-10 (Adapted)

A characteristic of a process costing system is that
a. Costs are accumulated by order.
b. It is used by a company manufacturing custom machinery.
c. It requires a lot more detailed accounting than does a job order costing.
d. Work in process inventory is restated in term of completed units.

TOA 8-11 (Adapted)

In a process cost system, costs are assigned only
a. To one work in process account.
b. To work in process and finished goods inventory.
c. To work in process, finished goods, and cost of goods sold.
d. To work in process accounts.

TOA 8-12 (AICPA)

In a process cost system, the application of factory overhead usually is recorded as an increase in
a. Cost of goods sold
b. Work in process inventory control
c. Factory overhead control
d. Finished goods inventory control

TOA 8-13 (Adapted)

In a process cost system, manufacturing overhead
a. Is assigned to finished goods at the end of each accounting period.
b. Is assigned to a work in process account for each job as the job is completed.
c. Is assigned to a work in process account for each production department

on the basis of a predetermined overhead rate.

d. Is assigned to a work in process account for each production department as overhead costs are incurred.

TOA 8-14 (Adapted)

In process cost system, the journal entry to assign raw materials costs, a company

a. Debits Finished Goods Inventory.
b. Often debits two or more Work in Process accounts.
c. Generally credits two or more Work in Process accounts
d. Credits Finished Goods Inventory.

TOA 8-15 (Adapted)

Equivalent units of production are equal to the

a. Units completed by a production department in the period.
b. Number of units worked on during the period by a production department.
c. Number of whole units that could have been completed it all work of the period had been used to produce whole units.
d. Identifiable units existing at the end of the period in a production department.

TOA 8-16 (Adapted)

The difference between EUP calculated using FIFO and EUP calculated using weighted average is the equivalent units

a. Started and completed during the period.
b. Residing in beginning work in process inventory.
c. Residing in ending work in process inventory.
d. Uncompleted in work in process inventory.

TOA 8-17 (Adapted)

When will the average process costing method produce the same cost of goods manufactured as the first in first out process costing method?

a. When materials are added 100% at the end of the process.
b. When materials are added 100% at the beginning of the process.
c. When the beginning work in process and ending work in process

inventory are equal.

d. When there is no beginning work in process inventory

TOA 8-18 (Adapted)

In a process costing system using the weighted average method, cost per equivalent unit for a given cost component is found by dividing which of the following by EUP?

a. Only current period cost.
b. Current period cost plus the cost of the beginning inventory.
c. Current period cost less the cost of the beginning inventory.
d. Current period cost plus the cost of ending inventory.

TOA 8-19 (Adapted)

To compute equivalent units of production using FIFO method of process costing, work for the current period must be stated in units

a. Completed during the period and units in ending inventory.
b. Completed from beginning inventory, units started and completed during the period, and units completed in ending inventory.
c. Started during the period and units transferred out during the period.
d. Processed during the period and units completed during the period.

TOA 8-20 (AICPA)

A process costing system was used for a department that began operations in January. Approximately the same number of physical units, at the same degree of completion, were in work in process at the end of both January and February. Monthly conversion costs are assigned to ending work in process and units completed. Compared with the FIFO method, would the weighted average method use the same or a greater number of equivalent units to calculate the monthly cost assignments?

	EUP for Average Compared with FIFO	
	January	February
a.	Same	Same
b.	Greater number	Greater number
c.	Greater number	Same
d.	Same	Greater number

TOA 8-21 (Adapted)

When added materials in subsequent departments result in an increase of the units produced. the unit transferred in cost will

a. Be reclassified as new materials.
b. Be increased to provide for the additional units.
c. Be accounted for under the FIFO costing method.
d. Be decreased as they are spread over more units.

TOA 8-22 (Adapted)

If a company reports two different unit costs for goods transferred to the next department, it is reasonable to assume that

a. The department accounts for lost units at the end of the process.
b. A FIFO costing method is used.
c. Lost unit costs are computed separately.
d. An average costing method is used.

TOA 8-23 (AICPA)

In a production cost report using process costing, transferred-in costs are similar to

a. Direct materials added at a point during the process.
b. Conversion costs added during the process.
c. Costs transferred to the next process.
d. Costs included in beginning inventory.

TOA 8-24 (AICPA)

What are transferred-in costs in a process costing system?

a. Labor costs incurred for transferring employees from another department within the same plant instead of hiring temporary workers from the outside.
b. Costs of the product of a previous internal process that is subsequently used in a succeeding internal process.
c. Supervisory salaries that are transferred from an overhead cost center to a production cost center.
d. Ending work in process inventory of a previous process that will be used in a succeeding process.

TOA 8-25 (AICPA)

Purchased direct materials are added in the second department of a three-department process. This addition increases the number of units produced in the second department and will

a. Always change the direct labor cost percentage in the ending work in process inventory.
b. Never cause an adjustment to the unit cost transferred in from the first department.
c. Always increase total unit costs.
d. Always decrease total ending work in process inventory.

TOA 8-26 (Adapted)

Which of the following would fall within the range of tolerance for a production cycle?

	Abnormal Loss	Normal Loss
a.	Yes	Yes
b.	Yes	No
c.	No	No
d.	No	Yes

TOA 8-27 (Adapted)

Spoiled units are

a. Units that cannot be economically reworked to bring them up to standard.
b. Units that can be economically reworked to bring them up to standard.
c. The same as defective units.
d. Considered abnormal losses.

TOA 8-28 (Adapted)

When spoilage occurs because of some action taken by the customer, the unrecoverable cost of spoilage should be charged to

a. Work in process
b. Spoiled goods inventory
c. Factory overhead control
d. Applied factory overhead

TOA 8-29 (Adapted)

When spoilage occurs because of some internal failure, the unrecoverable cost should be charged to

a. Work in process
b. Spoiled goods inventory
c. Factory overhead control
d. Applied factory overhead

TOA 8-30 (Adapted)

A unit that is rejected at a quality control inspection point, but can be reworked and sold is referred to as a

a. Spoiled unit
b. Scrap unit
c. Abnormal unit
d. Defective unit

TOA 8-31 (Adapted)

The amount of materials left over from a production process or production cycle for which there is no further use is

a. Scrap
b. Abnormal spoilage
c. Waste
d. Normal spoilage

TOA 8-32 (AICPA)

A department adds material at the beginning of a process and identifies defective units when the process is 40% complete. At the beginning of the period, there was work in process. At the end of the period, the number of work in process units equaled the number of units transferred to finished goods. If all units in ending work in process were 66 2/3% complete, then ending work in process should be allocated

a. 50% of all normal defective unit costs.
b. 40% of all normal defective unit costs.
c. 50% of the material costs and 40% of the conversion costs of all normal defective unit costs.
d. None of the normal defective unit costs.

MULTIPLE CHOICE – Problems

PROB. 8-1 Adapted)

If the beginning balance for the month of May of the materials inventory account was P27,500, the ending balance for May is P28,750, and P128,900 of materials were used during the month, the materials purchased during the month cost

a. 101,400
b. 127,650
c. 130,150
d. 157,650

PROB. 8-2 (Adapted)

Brown Co. started 9,000 units in October. The company transferred 7,000 finished units and ended the period with 3,500 units that were 40% complete as to both materials and conversion costs. What is the beginning work in process inventory units?

a. 500
b. 600
c. 1,500
d. 2,000

PROB. 8-3 (AICPA)

Kew Co. had 3,000 units in work in process at April 1 that were 60% complete as to conversion cost. During April, 10,000 units were completed. At April 30, the 4,000 units in work in process were 40% complete as to conversion cost. Direct materials are added at the beginning of the process. How many units were started during April?

a. 9,000
b. 9,800
c. 10,000
d. 11,000

PROB. 8-4 (Adapted)

The Ryobi Co. has no units in beginning work in process inventory. During the month, it had started 7,000 units into production. At the end of the month, 500 units remained still process which is 20% completed. How many physical units are to be accounted for during the period?

a. 7,000
b. 7,360
c. 7,600
d. 7,340

PROB. 8-5 (Adapted)

Store Co. adds materials at the start of production. October information for the company follows:

Beginning work in process (45% complete)	10,000 units
Started this period	120,000 units
Ending work in process (80% complete)	8,200 units
Beginning work in process costs:	
Materials	P 24,500
Conversion	68,905
Current period costs:	
Materials	75,600
Conversion	130,053

a. How many units must be accounted for?
   a. 128,200
   b. 138,200
   c. 130,000
   d. 118,200

b. What is the total cost to account for?
   a. 205,653
   b. 299,058
   c. 274,558
   d. 93,405

PROB. 8-6 (Adapted)

Winn Co. uses a weighted average process costing system. Material is added at the start of the process. Winn Co. started 13,000 units into production and had 4,500 units in process at start of the period that were 60% complete as to conversion. If Winn transferred out 11,750 units, how many units were in ending work in process inventory?

a. 1,250
b. 3,500
c. 5,750
d. 3,000

PROB. 8-7 (Adapted)

Short Co. transferred 5,500 units to finished goods inventory during June. On June 1, the company had 300 units on hand (40% complete as to both materials and conversion costs). On June 30, the company had 800 units (10% complete as to material and 20% complete as to conversion costs). How many units were started and completed during June?

a. 5,200
b. 5,380
c. 5,500
d. 6,300

PROB. 8-8 (RPCPA)

Venus Wonder Drug Co. manufactures "Milagro" from the following successive processes: extracting, mixing and packaging. Materials are added in the mixing department in the form of additives. Venus uses the average cost method in accounting for work in process. Pertinent information from the mixing department during May show:

	Beg. inventory	Added in May
Costs charged to Mixing:		
Cost from Extracting	P 29,120	P 251,680
Direct materials	4,940	41,860
Direct labor	1,560	40,560
Overhead	3,120	81,120

Also during the month, Mixing had units in beginning inventory of 1,000; transfers from Extracting of 2,000; units added to process in this (Mixing) department of 6,000; transfer to Packaging of 7,800; and units in ending inventory (100% materials and 50% labor and overhead) of 1,200. What are the total equivalent units for (1) materials, (2) labor, and (3) overhead in the Mixing department?

a.	(1) 7,800	(2) 7,800	(3) 7,800
b.	(1) 7,800	(2) 7,500	(3) 7,500
c.	(1) 1,200	(2) 300	(3) 300
d.	(1) 9,000	(2) 8,400	(3) 8,400

PROB. 8-9 (Adapted)

Expo Co. uses a FIFO process costing system and had beginning work in process inventory of 5,000 units that were 40% complete as to conversion. Expo started and completed 42,000 units this period and had ending work in process inventory of 12,000 units. How many units were started this period?

a. 54,000
b. 59,000
c. 42,000
d. 47,000

PROB. 8-10 (Adapted)

Department A is the first stage of Mann Co.'s production cycle. The following information is available for conversion costs for the month of May:

Beginning work in process (60% complete)	20,000 units
Started in May	340,000 units
Completed in May and transferred to Dept. B	320,000 units
Ending work in process (40% complete)	40,000 units

Using the FIFO method, what is the equivalent unit for the conversion cost calculation?

a. 336,000
b. 360,000
c. 328,000
d. 324,000

PROB. 8-11 (Adapted)

Connor Co. computed the flow of physical units completed for Department X for the month of March as follows:

Units completed:	
From work in process, March 1	15,000
From March production	45,000
Total	60,000

Materials are added at the beginning of the process. The 12,000 units of work in process at March 31 were 80% complete as to conversion costs. The work in process at March 1 was 60% complete as to conversion costs. Using the FIFO method, what is the equivalent unit for March conversion costs?

a. 60,600
b. 55,200
c. 57,000
d. 54,600

PROB. 8-12 (RPCPA)

Bayani Manufacturing Co. using the FIFO process cost system, has the following data for the month of April:

		Percent Complete	
	Whole Units	Materials	Conversion
Beginning inventory	15,000	100%	40%
Transferred in	150,000		
Transferred out	120,000		
Ending inventory	45,000	100%	30%

The equivalent units for materials and conversion costs would be:

a. 150,000 materials, 127,500 conversion costs
b. 165,000 materials, 139,500 conversion costs
c. 135,000 materials, 124,500 conversion costs
d. 150,000 materials, 133,500 conversion costs

PROB. 8-13 (Adapted)

The Grinding Department of Gilingan Manufacturing Corp. had the following information for the month of May: Work in process, May 1, 80,000 units; Work in process, May 31, 120,000 units, and started in process during the month of May, 600,000 units. The total cost of production for the month amounted to P2,344,000, and the cost of beginning work in process was P280,000. Beginning work in process is 70% complete; while the ending work in process is 80% complete. Assuming FIFO costing method was used, how many equivalent production units were completed in May?

a. 680,000
b. 640,000
c. 600,000
d. 560,000

PROB. 8-14 (RPCPA)

The following are the production information of Quick Manufacturing Co., in its First department for the month of October:

Inventory, October 1: 25% complete	12,000 units
Started in process during October	30,000 units
Transferred	28,000 units
Inventory, October 31:	
50% complete	8,000 units
2/3 complete	6,000 units

Under the First-In, First-Out method, the equivalent production of the First department of Quick Manufacturing Co. for the month of October is:

a. 33,000 units
b. 42,000 units
c. 32,000 units
d. 44,000 units

PROB. 8-15 (Adapted)

In May, Producers, Inc. began its operations and produced 140,000 complete units of product "Conditioner" plus 5,000 incomplete units, which were half

done. All materials were placed at the start of the process. The following production costs were presented for the month of May:

Materials	217,500
Conversion cost	71,250

How many equivalent units were completed as to conversion in May?

a. 71,250
b. 140,000
c. 142,500
d. 145,000

PROB. 8-16 (AICPA)

On October 1, Yankee Co. had 20,000 units of work in process in Department 1. They were 100% complete as to materials costs and 20% complete as to conversion costs. During October, 160,000 units were started in Department 1, and 170,000 units were completed and transferred to Department 2. Work in process on October 31 was 100% complete as to materials costs and 40% complete as to conversion costs. By what amount would the equivalent units for conversion costs for the month of October differ if the FIFO method were used instead of the weighted average method?

a. 20,000 decrease
b. 16,000 decrease
c. 6,000 decrease
d. 4,000 decrease

PROB. 8-17 (RPCPA)

Updates Processors is a company that sells food processors, and it manufactures these single continuous processing operations. At the end of August, there were 200 units on hand with a cost of P30,095 consisting of P25,200 in materials cost and P4,895 in conversion cost. These were 100% complete as to materials, and 25% complete as to conversion cost. During the month of September, 1,200 units were added to production with materials cost of P168,000. Conversion cost during the month were P158,125. At the end of September, the processors which have not been completed total 200 units which were 100% complete as to materials and 50% complete as to conversion cost. There were no units lost in

process. What were the equivalent units of production for the month of September?

	Materials	Conversion
a.	1,400 units	1,350 units
b.	1,200 units	1,100 units
c.	1,200 units	1,150 units
d.	1,200 units	1,250 units

PROB. 8-18 (RPCPA)

Department CC has the following April production information:

	Units
Beginning work in process	24,000
Units started during the month	780,000
Units transferred to next operation in April	744,000
Ending work in process (40% complete)	60,000

Beginning work in process cost	P 120,000
April's production cost	5,256,000

The unit cost of production is

a. 6.50
b. 6.89
c. 7.00
d. 20.22

PROB. 8-19 (RPCPA)

At the High Quality Industrial Corp., the process begins with the blending of various chemicals and ends with the canning of the paint after which the gallon cans are sent to the shipping department for packing and crating. Direct labor and overhead are continuously added during the processing. Overhead is applied at the rate of P30 per direct labor hour.

Data for the month of October follows:

Physical units:	
Work in process, beginning inventory	4,000 gallons
Raw materials - chemicals (7% complete)	
Direct labor (25% complete)	
Overhead (25% complete)	
Started in process	21,000 gallons
Completed and transferred	20,000 gallons
Work in process, ending inventory:	
Raw materials - chemicals (100% complete)	
Raw materials - cans (7% complete)	
Costs for the month:	
Work in process, beginning inventory:	
Raw materials – chemicals	P 456,000
Direct labor (P100 per hour)	62,500
Overhead	18,750
Current costs added:	
Raw materials – chemicals	P 2,284,000
Raw materials – cans	70,000
Direct labor (P100 per hour)	330,000
Overhead	105,000

Using the weighted average method, the cost of raw materials - chemicals in the work in process ending inventory is:

a. 687,000
b. 571,000
c. 548,000
d. 438,400

PROB. 8-20 (Adapted)

During March, Queen Company's Department Y equivalent unit product costs, computed under the average cost method, were as follows:

Materials	P 1.00
Conversion	3.00
Transferred in	5.00

Materials are introduced at the end of the process in Department Y. There were 4,000 units (40% complete as to conversion costs) in work in process at March 31.

What is the total cost assigned to the March 31 work in process inventory?

a. 36,000
b. 28,800
c. 27,200
d. 24,800

PROB. 8-21 (AICPA)

The following information pertains to Lap Co.'s Palo Division for the month of April:

	Number of Units	Cost of Materials
Beginning work in process	15,000	P5,500
Started in April	40,000	18,000
Units completed	42,500	
Ending work in process	12,500	

All materials are added at the beginning of the process. Using the weighted average method, the cost per equivalent unit for materials is

a. 0.59
b. 0.55
c. 0.45
d. 0.43

PROB. 8-22 (RPCPA)

For the month of May, the Cutting Department of Damit Co. had 80% complete as to the beginning work in process and 50% complete as to the ending work in process. Related data follow:

	Units	Conversion Cost
Work in process, May 1	50,000	P 88,000
Units started and cost incurred in May	270,000	572,000
Units completed and transferred to the next department in May	200,000	

If the company uses FIFO method, the conversion cost of the work in process in the Cutting Department at the end of May would amount to

a. 156,000
b. 254,000
c. 132,000
d. 176,000

PROB 8-23 (Adapted)

The Fort Corp. has the following information for the month of May:

Beginning work in process (70% complete)	6,000 units
Started this period	24,000 units
Ending work in process (10% complete)	8,500 units
Beginning work in process costs:	
Materials	P 23,400
Conversion	50,607
Current period costs:	
Materials	31,500
Conversion	76,956

a. Assume that FIFO process costing is used, what is the cost per equivalent unit for conversion?
   a. 7.03
   b. 3.44
   c. 4.24
   d. 5.71

b. Assume that weighted average process costing is used, what is the cost per equivalent unit for materials?
   a. 1.83
   b. 1.05
   c. 0.55
   d. 1.31

PROB. 8-24 (RPCPA)

Changley, Inc. manufactures a product which goes through three consecutive processes, Process 1, Process 2, and Process 3. Data for the month of September are as follows:

	Process 1	Process 2	Process 3
Opening work in process	P 8,000	P 13,000	P 2,000
Materials added	20,000	4,000	5,000
Conversion costs	10,000	10,000	16,000
Closing work in process	6,000	9,000	4,000

What was the value of the output transferred from Process 3 to the finished goods warehouse for the month of September?

a. 63,000
b. 65,000
c. 67,000
d. 69,000

PROB. 8-25 (Author)

An entity is employing process costing regarding its production cycle. Conversion costs are added uniformly at during the production process while direct materials are added 10% at the start of production process, 50% at the middle of the production process and the remainder at the end of production process. The production data of the entity during the year is presented below:

Beginning work in process inventory (30% incomplete as to conversion costs)	10,000 units
Units started during the year	30,000 units
Ending work in process inventory (75% incomplete as to conversion costs)	5,000 units

Additional notes are provided:

- There is no spoilage during the period.
- The costs of beginning inventory consist of P103,000 costs of direct materials and P107,500 conversion costs.
- The total manufacturing costs consist of P252,000 costs of direct materials and P146,250.

1. What is the cost per unit of direct material under average process costing?
   a. 10.00
   b. 9.00
   c. 8.00
   d. 7.00

2. What is the cost per unit of conversion cost under average process costing?
   a. 10.00
   b. 9.00
   c. 8.00
   d. 7.00

3. What is the cost per unit of direct material under FIFO process costing?
   a. 10.00
   b. 9.00
   c. 8.00
   d. 7.00

4. What is the cost per unit of conversion cost under FIFO process costing?
   a. 5.00
   b. 9.00
   c. 8.00
   d. 7.00

PROB. 8-26 (Adapted)

Gyro Products transferred 10,000 units to one department. An additional 3,000 units of materials were added in the department. At the end of the month, 7,000 units were transferred to finished goods; while 4,000 units remained in work in process inventory. There was no beginning inventory, and lost units were a result of normal production shrinkage. The production costs for the period in this department would be effectively allocated over

a. 12,000 units
b. 11,000 units
c. 10,000 units
d. 7,000 units

PROB. 8-27 (Adapted)

A company manufactures a product that passes through two production departments, Molding and Assembly. Direct materials are added in the Assembly Department when conversion is 50% complete. Conversion costs are incurred

uniformly. The activity in units for the Assembly Department during April is as follows:

Work in process, April 1 (60% complete as to conversion)	5,000
Transferred in from Molding Department	32,000
Defective at final inspection (within normal limits)	2,500
Transferred out to finished goods inventory	28,500
Work in process, April 30 (40% complete as to conversion)	6,000

The number of equivalent units for direct materials in the Assembly Department for April calculated on the weighted average basis is

a. 26,000
b. 31,000
c. 34,000
d. 37,000

PROB. 8-28 (RPCPA)

Elsa, Inc. instituted a new process in October. During this month, 20,000 units were started in Department A. Of the units started, 2,000 were lost in process, 14,000 units were transferred to Department B, and 4,000 units remained in process on October 31. The work in process at October 31 was 100% complete as to material costs and 50% complete as to conversion costs. Material costs of P54,000 and conversion costs of P80,000 were charged to Department A in October. What was the total cost transferred to Department B?

a. 93,800
b. 112,000
c. 105,000
d. 114,200

PROB. 8-29 (Adapted)

In manufacturing its products for the month of March, Leo Co. incurred normal production shrinkage of P10,000 and spoilage due to internal failure of P12,000. How much spoilage cost should Leo charge to Factory Overhead Control for the month of March?

a. 22,000
b. 12,000
c. 10,000
d. 0

PROB. 8-30 (AICPA)

Dex Co. had the following production for the month of June:

	Units
Work in process at June 1	10,000
Started during June	40,000
Completed and transferred to finished goods	33,000
Abnormal spoilage incurred	2,000
Work in process at June 30	15,000

Materials are added at the beginning of the process. As to conversion cost, the beginning work in process was 70% completed and the ending work in process was 60% completed. Spoilage is detected at the end of the process. Using the weighted average method, the equivalent units for June, with respect to conversion, were

a. 42,000
b. 44,000
c. 45,000
d. 46,000

PROB. 8-31 (AICPA)

The Forming Department is the first of a two-stage production process. Spoilage is identified when the units have completed the Forming process. Cost of spoiled units are assigned to units completed and transferred to the second department in the period spoilage is identified. The following information concerns Forming's conversion costs in May:

	Units	Conversion Cost
Beginning work in process (50% complete)	2,000	P 10,000
Units started in May	8,000	75,500
Spoilage – normal	500	
Units completed and transferred	7,000	
Ending work in process (80% complete)	2,500	

Using the weighted average method, what was Forming's conversion cost transferred to the second production department?

a. 59,850
b. 64,125
c. 67,500
d. 71,250

PROB. 8-32 (AICPA)

In its April production, Hern Co. which does not use a standard costing system incurred total production costs of P900,000, of which Hern attributed P60,000 to normal spoilage and P30,000 to abnormal spoilage. Hern should account for this spoilage as

a. Period cost of P90,000.
b. Inventoriable cost of P90,000.
c. Period cost of P60,000 and inventoriable cost of P30,000.
d. Period cost of P30,000 and inventoriable cost of P60,000.

PROB. 8-33 (AICPA)

Hoyt Co. manufactured the following units:

Saleable	5,000
Unsaleable (normal spoilage)	200
Unsaleable (abnormal spoilage)	300

Manufacturing costs totaled P99,000. What amount should Hoyt debit to finished goods?

a. 90,000
b. 93,600
c. 95,400
d. 99,000

PROB. 8-34 (AICPA)

During May, Mercer Co. completed 50,000 units costing P600,000, exclusive of spoilage allocation. Of these completed units, 25,000 were sold during the month. An additional 10,000 units, costing P80,000, were 50% complete at May 31. All units are inspected between the completion of manufacturing and transfer to finished goods inventory. Normal spoilage for the month was P20,000, and abnormal spoilage of P50,000 was also incurred during the month. The portion of total spoilage that should be charged against revenue in May is

a. 50,000
b. 20,000
c. 70,000
d. 60,000

PROB. 8-35 (Author)

An entity is employing process costing regarding its production cycle. Conversion costs are added uniformly at during the production process while direct materials are added 20% at the start of production process, 45% at the middle of the production process and the remainder at the end of production process.

The entity is conducting inspection when the production process is at 45% of conversion cost. The production data of the entity during the year is presented below:

Beginning work in process inventory (40% incomplete as to conversion costs)	10,000 units
Units started during the year	40,000 units
Ending work in process inventory (80% complete as to conversion costs)	5,000 units
Units completed during the period	38,000 units

Normal spoilage is 10% of units started during the year.

1. What is the abnormal spoilage in units during the year?
   a. 7,000 units
   b. 4,000 units
   c. 3,000 units
   d. 2,000 units

2 What is the equivalent unit of production for direct material under average process costing?
   a. 42,650 units
   b. 41,150 units
   c. 38,250 units
   d. 43,750 units

3. What is the equivalent unit of production for conversion cost under average process costing?
   a. 44,650 units
   b. 45,150 units
   c. 43,250 units
   d. 46,150 units

4. What is the equivalent unit of production for direct material under FIFO costing?
   a. 35,150 units
   b. 37,250 units
   c. 36,150 units
   d. 38,450 units

5. What is the equivalent unit of production for conversion cost under FIFO costing?
   a. 39,150 units
   b. 41,250 units
   c. 37,450 units
   d. 38,650 units

PROB. 8-36 (RPCPA)

The Glorious Corp. manufacturers only one product in which the raw materials must pass through Processes A, B, and C, in that order, before completion. Inventories of Process C and of finished goods on October 1 were as follows:

Process C - 1,200 units, 2/3 completed P4,200.
Finished goods - 1,000 units at P3.00 per unit.

During October, the following transactions were completed:

2,000 units with a value of P5,000 were transferred from Process B.
Direct labor applied to Process C during October was P3,100.
Overhead costs for October applied to Process C were P3,200.

Inventories on October 31 are as follows:
Process C - 600 units 1/2 completed
Finished goods - 1,300 units

a. The processing cost per equivalent unit for October is:
   a. 3.50
   b. 2.75
   c. 3.00
   d. 1.50

b. The value of Process C inventory in process on October:
   a. 4,200
   b. 3,500
   c. 5,400
   d. 2,400

c. The number of units completed in October and transferred to finished goods is:
   a. 2,600
   b. 2,300
   c. 2,200
   d. 2,000

PROB. 8-37 (RPCPA)

Information concerning Department B of Simon Co. follows:

	Units	Total Cost	Transfer In	DM	CC
Beg. Work in Process	5,000	6,300	2,900		3,400
Units Transferred in	35,000	58,000	17;500	25,500	15,000
	40,000	64,300	20,400	25,500	18,400

Units completed	37,000
Ending work in process	3,000

Conversion costs were 20% complete as to the beginning work in process and 40% complete as to the ending work in process. All materials are added at the end of the process. Simon Co. uses the weighted average method.

a. The cost per equivalent units for conversion costs, rounded to the nearest centavo is:
   a. 0.44
   b. 0.46
   c. 0.48
   d. 0.50

b. The portion of the total cost of ending work in process attributable to transferred-in cost is:
   a. 0
   b. 1,500
   c. 1,530
   d. 1,650

PROB. 8-38 (Adapted)

Roger Co. manufactures Product X in a two-stage production cycle in Departments A and B. Materials are added at the beginning of the process in Department B. Roger uses the average costing method. Conversion costs for Department B were 50% complete as to the 6,000 units in beginning work in process, and 75% complete as to the 8,000 units in ending work in process.

A total of 12,000 units were completed and transferred out of Department B during February. An analysis of the costs relating to work in process and production activity in Department B for February follows:

	Transferred in Costs	Materials Costs	Conversion Costs
Work in process, Feb. 1			
Costs attached	12,000	2,500	1,000
February activity:			
Costs attached	29,000	5,500	5,000

What is the total cost per equivalent units transferred out for February of Product X?
   a. 2.82
   b. 2.85
   c. 2.05
   d. 2.78

PROB. 8-39 (RPCPA)

Ablan Co. produces a special kind of insecticides. Materials are added in the first stage of production which is the Mixing Department. For the month of March, the following data were gathered:

	No. of Units
Work in process, March 1 (40% complete as to conversion costs)	40,000
Started in process during the month	100,000
Transferred to Molding Department	85,000
Lost units in processing	10,000
Work in process, March 31 (60% complete as to conversion costs)	45,000

The cost corresponding to the lost units were absorbed by the remaining units. Using the weighted average method, the equivalent units for the material cost were:

a. 112,000
b. 140,000
c. 130,000
d. Answer not given

PROB. 8-40 (RPCPA)

Oddsends, a local company produces a small standard component in process operation. There is a quality check control at the end of the processing. Item which fail this check are sold off as scrap for P1.80 per unit. The expected rate of rejection is 10%. Normal loss is not given a cost, except that whatever scrap value it has is credited to the process account. The cost/value of the abnormal loss or gain, net of scrap value, is written off to the profit and loss account. Data for July are as follows:

No work in process at the beginning and end of the period.	
Materials input	1,000 units, P5,100
Conversion cost	P3,000
Output to finished goods	800 units

What was the full cost of the finished output that passes the quality control check?

a. 7,040
b. 7,920
c. 7,200
d. 8,100

ANSWERS – Theory of Accounts

TOA 8-1 *Suggested answer (d) Print shop Beverage drink manufacturer*

A job order costing system is used when products differ from one customer to another, that is, when products are heterogeneous. A process costing system is used when similar products are mass produced on continuous basis. For example, a print shop would use a job order costing system because each job will be unique. Each customer provides the specifications for the product desired. A beverage drink manufacturer, however, would use a process costing system because homogeneous units are produced continuously.

TOA 8-2 *Suggested answer (d)*

The accumulation of the costs of materials, labor, and manufacturing overhead is the same in a process cost system as in a job order cost system. However, ***the assignment of the three manufacturing cost elements to work in process in a process cost system is different from a job order cost system;*** *that is, among others, a job order cost system uses only one Work in Process account; while a process cost system uses multiple Work in Process accounts.*

TOA 8-3 *Suggested answer (b) Equivalent units of production*

Equivalent units of production are calculated in a process costing system. It allows work in process to be stated in terms of completed units, a step not necessary in a job order costing system, which assigns costs individually to each job. Stating work in process in terms of equivalent units of production permits calculation of average unit costs for mass produced homogeneous goods.

TOA 8-4 *Suggested answer (d) Process costing*

Process costing is used to assign costs to similar products that are mass produced on continuous basis. Costs are accumulated by department or cost centers rather than jobs. It is an averaging process that calculates the average cost of all units.

TOA 8-5 *Suggested answer (c) Process*

Process costing system is a method of accumulating and assigning costs to units of production in companies producing large quantities of homogeneous products. It accumulates costs by cost component in each production department and assign costs to units using equivalent units of production.

TOA 8-6 *Suggested answer (b)*

In process cost system, costs are applied to similar products that are mass-produced in a continuous fashion; and ***not assorted or heterogeneous in nature.***

TOA 8-7 *Suggested answer (b) Parallel*

In parallel product flow, certain portions of the work are done simultaneously and then brought together in a final process or processes for completion and transfer to finished goods.

TOA 8-8 *Suggested answer (b) Individual lots*

A process costing system is used for mass and continuous production processes. It assigns unit cost on the basis of the average costs of all units. A job order costing system is appropriate when producing individual, differentiable jobs, batches, or units/lots.

TOA 8-9 *Suggested answer (a) Prevention*

The best way to reduce total quality costs is to reduce the lack of quality. The best approach to quality improvement is to concentrate on prevention, that is, to seek out the causes of waste and inefficiency and then develop systematic plans to eliminate those causes. This approach to quality is founded on the belief that, by increasing prevention costs, fewer defects will occur and total quality costs will decline.

TOA 8-10 *Suggested answer (d) Work in process inventory is restated in terms of completed units*

In process costing, the amount of a resource that is required to complete one unit of a product with respect to the cost element being considered is called equivalent unit.

TOA 8-11 *Suggested answer (c) To work in process, finished goods, and cost of good sold.*

In process costing system, direct materials, direct labor, and manufacturing overhead are debited to the Work in Process account when they are committed to the manufacturing process. As goods are completed, their cost is transferred (debited) to finished goods inventory. And as finished goods are sold, their cost is transferred (debited) to cost of sales

TOA 8-12 *Suggested answer (b) Work in process inventory control*

The principal distinction between process costing and job order costing systems is that the latter use subsidiary work in process and finished goods ledgers to account for separate jobs. However, the same general ledger accounts are used in both systems, and cost flow among accounts is also the same. Both systems increase work in process control to record applied overhead.

TOA 8-13 *Suggested answer (c) Is assigned to a work in process account for each production department on the basis of a predetermined overhead rate*

In a process cost system, manufacturing overhead is allocated to the production departments on an objective and equitable basis; that is based on the activity that drives or causes the costs. Because the actual cost of manufacturing overhead differs each month and is not perfectly variable with respect to production activity, a predetermined manufacturing overhead rate is often used to smooth manufacturing overhead costs to production activity throughout the year. Manufacturing overhead is charged to the producing departments at the end of each month in order to determine the cost of the units of products manufactured during the month. If predetermined rates are used to apply overhead, the rates are multiplied by the actual amount of the activity base used in each production department.

TOA 8-14 *Suggested answer (b)*

Again, one of the differences between job order and process cost system is, a job order cost system uses only one work in process account: while a process cost system uses separate accounts for each department or manufacturing process. Thus, ***often debits two or more work in process accounts as the job is completed.***

TOA 8-15 *Suggested answer (c) Number of whole units that could have been completed if all work of the period had been used to produce whole units.*

Equivalent units of production is an approximation of the number of whole units of output that could have been produced during the period from the actual effort expended during that period and used in process costing system to assign costs to production.

TOA 8-16 *Suggested answer (b) Residing in beginning work in process inventory.*

Using average costing, some prior period costs, those in work in process beginning, are included in each period's average actual cost calculation, causing the efficiency or inefficiency of prior periods to show up again as part of variances for the current period. FIFO, in contrast, keeps current period costs separate from beginning work in process costs, and thus, it provides a current period actual cost amount that can be compared with a standard to judge current performance.

TOA 8-17 *Suggested answer (d) When there is no beginning work in process inventory*

TOA 8-18 *Suggested answer (b) Current period cost plus the cost of beginning inventory*

Weighted average method of process costing is a method of cost assignment that computes an average cost per equivalent unit of production for all units completed during the current period, combines beginning inventory units and costs with current production and costs, respectively, to compute the average.

TOA 8-19 *Suggested answer (b) Completed from beginning inventory, units started and completed during the period, and units completed in ending inventory.*

In contrast to the average method, FIFO costing allows the units and costs of beginning work in process to remain intact as a separate segment of activity to be accounted for. Beginning work in process is treated as being among the units transferred out in the current period, which is why the method's name is first-in, first-out. It requires more calculations to determine the costs of the work transferred out. The cost of the units in beginning work in process is the sum of their beginning inventory (prior period) cost plus the current period cost involved in completing them. All other units (those transferred out in excess of the number in beginning inventory and those in ending inventory) are assigned only current period cost.

TOA 8-20 *Suggested answer (d) Same, Greater number*

The weighted average method calculates EUP by adding the equivalent units in ending work in process to the total of all units completed during the period, regardless of when they were started. The FIFO method determines EUP by subtracting the work done on the beginning work in process in the prior period from the weighted average total.

If the number of EUP in beginning inventory is zero, as it was for the month of January, the two methods produce the same result. Otherwise, the weighted average computation is greater.

TOA 8-21 *Suggested answer (d) Be decreased as they are spread over more units*

In some production process, the addition of materials results in an increase in the total volume or number of units of the product. The addition of materials increases the total volume of the product to be accounted for. Thus, the increased quantity of the product absorbs the same total cost transferred from the preceding department.

TOA 8-22 *Suggested answer (b) A FIFO costing method is used*

Under the FIFO cost flow assumption, the cost of the first units transferred out of the department are deemed to come from beginning inventory. The FIFO method requires more calculations to determine the costs of the work transferred out: the cost of the units of the beginning work in process is the sum of their beginning inventory (prior period) cost plus the current period cost involved in completing them. This demonstrates the presence of the two distinct layers of cost under the FIFO method.

TOA 8-23 *Suggested answer (a) Direct materials added at a point during the process*

Transferred-in costs are similar to materials added at a point during the process because both attach to the product at that point, which is usually the beginning of the process. Computations for transferred-in costs are usually separate from those for other direct materials costs and conversion costs. Note that answer (c) is incorrect because transferred out costs are those attached to completed units.

TOA 8-24 *Suggested answer(b)*

Transferred-in costs are ***those costs of the product of a previous internal process that is subsequently used in a succeeding internal process.*** *These are similar to direct materials costs added at the beginning of the process.*

TOA 8-25 *Suggested answer (a)*

When direct materials are added to the production process in the second department, thereby increasing the number of units produced, more units are available to absorb the direct labor and overhead costs. Accordingly, ***the labor and overhead cost percentages are reduced relative to direct materials cost.***

TOA 8-26 *Suggested answer (d) No, Yes*

A normal loss of units falls within a tolerance level expected during the production; while abnormal loss of units is a loss in excess of the normal, predicted tolerance limits. Thus, when an abnormal loss occurs, so does a normal loss.

TOA 8-27 *Suggested answer (a) Units that cannot be economically reworked to bring them up to standard*

Spoiled units are units that are rejected at a control inspection point for failure to meet appropriate standards of quality or designated product specifications, and cannot be economically reworked to be brought up to standard.

TOA 8-28 *Suggested answer (a) Work in process*

If spoilage occurs because of some action taken by the customer, like alteration after the job was started, the customer should be charged for the cost caused by spoilage. The unrecoverable cost of the spoiled goods should be charged to the job, that is, the salvage value of the spoiled goods should be removed from the job, but all costs in excess of the salvage value should remain on the job and be charged to the customer.

TOA 8-29 *Suggested answer (c) Factory overhead control*

If spoilage occurs because of the internal failure, such as an employee error or worn-out machinery, the unrecovered cost of spoiled goods should be charged to factory overhead control and reported periodically to management.

TOA 8-30 *Suggested answer (d) Defective unit*

Defective units are those that has been rejected at a control inspection point for failure to meet appropriate standards of quality or designated product specifications, but can be economically reworked and sold through normal distribution channels.

TOA 8-31 *Suggested answer (c) Waste*

Waste is the amount of raw materials left over from a production process or production cycle for which there is no further use. It is usually not salable at any price and must be discarded.

TOA 8-32 *Suggested answer (a) 50% of all normal defective units*

Whenever the loss of production volume is not related to an internal quality failure (normal production loss), the total cost of the lost units is absorbed by the remaining good units. By omitting the lost units in the equivalent unit computation, the remaining good units absorbed all the cost. Since the ending work in process represents one-half of the total good units produced during the period, 50% of the normal defective units will be absorbed by ending work in process.

SOLUTIONS – Problems

PROB. 8-1 *Suggested answer (c) P130,150*

Ending materials inventory	28,750
Add materials used	128,900
Total	157,650
Less beginning materials inventory	27,500
Materials purchased	130,150

Purchases equal usage adjusted for the inventory change.

PROB. 8-2 *Suggested answer* (c) 1,500 units

Total units placed in process (7,000 + 3,500)	10,500
Less units started	9,000
Beginning work in process inventory units	1,500

Process costing is a method of accumulating and assigning costs to units of production in companies that make large quantities of homogeneous products. Units are transferred from one department to the next; unit costs are also transferred so that a total production cost is accumulated by the end of production. In the absence of lost units, total units to account for, which is the sum of the beginning inventory units and the units started during the current period, is the same as the total units placed in process.

PROB. 8-3 *Suggested answer (d) 11,000*

Completed units	10,000
Add work in process, April 30	4,000
Total	14,000
Less work in process, April 1	3,000
Units started during April	11,000

When total units placed in process is composed of beginning work in process inventory and those started during the period, in the absence of lost units, total units accounted should be composed of the completed units and ending

work in process inventory units. Thus, the units started during the current period should be the difference between the total units placed in process and the beginning work in process inventory units.

PROB. 8-4 *Suggested answer (a) 7,000*

Physical units are the actual units to be accounted for during a period, irrespective of any work performed. Total units to be accounted for is composed of units in process at the beginning of the period and units started during the period. Thus, in this case, where there is no unit still in process at the beginning the period, the total physical units to be accounted for is 7,000 units started during the period.

PROB. 8-5

a. *Suggested answer (c) 130,000*

Work in process, beginning	10,000
Add started this period	120,000
Total units to be accounted for	130,000

In the absence of lost units, the total units to be accounted for, which is the completed units and work in process at the end of the period, is the sum of work in process at the beginning of the period and units started during the period.

b. *Suggested answer (b) 299,058*

Beginning work in process costs (24,500+68,905)	93,405
Add current period costs (75,600+130,053)	205,653
Total costs to be accounted for	299,058

The total costs to be accounted for are the costs that correspond with work in process at the beginning of the period and that of started during the period.

PROB. 8-6 *Suggested answer* (c) 5,750 units

Total units placed in process (4,500 + 13,000)	17,500
Less completed units	11,750
Ending work in process inventory units	5,750

Weighted average method of process costing is the method of cost assignment that computes an average cost per equivalent unit of production for all units completed during the current period. It combines beginning inventory units and costs with current production and costs, respectively, to compute the average.

In the absence of lost units, total units to account for, which is the sum of the beginning inventory units and the units started during the current period, is the same as the total units placed in process.

PROB. 8-7 *Suggested answer* (a) 5,200 units

Complete units	5,500
Less beginning work in process inventory units	300
Started and completed units	5,200

In process costing, units are transferred from one department to the next; unit costs are also transferred so that a total production cost is accumulated by the end of production. In most cases, due to uncompleted units at the end of the process, units started and completed is the difference between the number of units completed for the period and the units in beginning inventory. It can also be computed as the number of units started during the period minus the units in ending inventory.

PROB. 8-8 *Suggested answer (d) 9,000 8,400 8,400*

	Materials	Labor	Overhead
Completed units	7,800	7,800	7,800
Add work in process, end:			
Materials (100%)	1,200		
Labor (50%)		600	
Overhead (50%)			600
Equivalent units, Average	9,000	8,400	8,400

The requirement is to determine specifically the equivalent units for materials, labor and overhead, thus the conversion costs (labor and overhead) must be computed separately.

PROB. 8-9 *Suggested answer* (a) 54,000 units

Completed units (5,000 + 42,000)	47,000
Add ending work in process inventory units	12,000
Total units placed in process	59,000
Less beginning work in process inventory units	5,000
Units started during the current period	54,000

FIFO method of process costing is the method of cost assignment that computes an average cost per equivalent units of production for the current period. It keeps beginning inventory units and costs separate from current period production and costs.

Again, when total units placed in process is composed of beginning work in process inventory and those started during the period, in the absence of lost units, total units accounted should be composed of the completed units and ending work in process inventory units. Thus, the units started during the current period should be the difference between the total units placed in process and the beginning work in process inventory units.

PROB. 8-10 *Suggested answer* (d) 324,000 units

	Conversion
Completed units	320,000
Add work in process, end (40,000 x 40%)	16,000
Equivalent units (Average)	336,000
Less work in process, beg. (20,000 x 60%)	12,000
Equivalent units (FIFO)	324,000

First-In, First-Out (FIFO) assumes that units in process at the beginning of the period are to be completed ahead of those that were started in process during the period. Hence the equivalent production of such units will be the work done on them during the period and is equal to the whole unit minus the stage of completion of the unit at the beginning of a costing period.

PROB. 8-11 *Suggested answer* (a) 60,600

	Conversion
Completed units	60,000
Add work in process, end (12,000 x 80%)	9,600
Equivalent units (Average)	69,600
Less work in process, beg. (15,000 x 60%)	9,000
Equivalent units (FIFO)	60,600

Again, First-In, First-Out (FIFO) assumes that units in process at the beginning of the period are to be completed ahead of those that were started in process during the period. Hence the equivalent production of such units will be the work done on them during the period and is equal to the whole unit minus the stage of completion of the unit at the beginning of a costing period.

PROB. 8-12 *Suggested answer (a) 150,000 127,500*

	Materials	Conversion
Completed units	120,000	120,000
Add work in process, end: (45,000)		
Materials (45,000 x 100%)	45,000	
Conversion (45,000 x 30%)		13,500
Equivalent production, Average	165,000	133,500
Less work in process, beg.: (15,000)		
Materials (15,000 x 100%)	15,000	
Conversion (15,000 x 40%)		6,000
Equivalent production, FIFO	150,000	127,500

Under the FIFO cost flow assumption, the costs of the first units transferred out of the department are deemed to come from beginning inventory. In order to compute the number of equivalent units of current period cost required to complete the units in beginning inventory, the stage of completion of the units in beginning inventory must be known.

PROB. 8-13 *Suggested answer* (c) 600,000

Completed units (80,000 + 600,000 - 120,000)	560,000
Add work in process, May 31 (120,000 x 80%)	96,000
Equivalent production, Average	656,000
Less work in process, May 1 (80,000 x 70%)	56,000
Equivalent production, FIFO	600,000

Normally, in manufacturing operations, there are units that are not complete at the beginning and at the end of a costing period. Materials, labor, and overhead have been used on these units but not in an amount sufficient to complete them. Therefore, the equivalent unit of production for these incomplete units must be computed for each cost element, which is the amount of resource (such as materials, labor, and overhead) that is required to complete one unit of the product with respect to the cost element being considered.

The FIFO costing method assumes that units in process at the beginning of the period are to be completed ahead of those that were started in process during the period, hence the equivalent units of production will be the work done on them during the period and is equal to the whole unit minus the stage of completion of the unit at the beginning of the period.

PROB. 8-14 *Suggested answer (a) 33,000*

Completed units		28,000
Add work in process, end:		
(50% x 8,000 units)	4,000	
(2/3 x 6,000 units)	4,000	8,000
Equivalent production, Average		36,000
Less work in process, beg. (25% x 12,000 units)		3,000
Equivalent production, FIFO		33,000

As a consequence of FIFO inventory layering procedure, equivalent units are computed for current period costs only. Total current period equivalent units equal the sum of the number of equivalent units of current period cost added to complete the units in beginning inventory, plus the number of units started

and completed during the current period, plus the number of equivalent units in ending inventory. In order to compute the number of equivalent units of current period cost required to complete the units in beginning inventory, the stage of completion of the units in beginning inventory must be known.

An alternative approach of computing the equivalent production, FIFO method, is shown below:

Work done on completed & transferred: (28,000)		
Beginning inventory (75% x 12,000)	9,000	
Started and transferred (28,000 - 12,000 x 100%)	16,000	25,000
Work done on ending inventory: (14,000)		
(50% x 8,000)	4,000	
(2/3% x 6,000)	4,000	8,000
Equivalent production, FIFO method		33,000

PROB. 8-15 *Suggested answer* (c) 142,500

	Conversion
Completed units	140,000
Add work in process, end (5,000 x 1/2)	2,500
Equivalent production, Average	142,500

Since units of product in ending inventories usually are not fully completed, the number of equivalent units must be computed for each element of cost. Based on the foregoing information, there is no beginning inventory; thus, the equivalent unit of production is identical under both methods (Average and FIFO).

PROB. 8-16 *Suggested answer (d) 4,000 decrease*

EUP, work in process, beginning (20,000 x 20%)	4,000

The weighted average method combines previous and current period work; while FIFO method includes only the equivalent units of production for the work done in the current period. Thus, the difference will be the EUP for beginning work in process.

PROB. 8-17 *Suggested answer (d) 1,200 units 1,250 units*

	Materials	Conversion
Completed units	1,200	1,200
Add work in process, end: (200 units)		
Materials (100% x 200)	200	
Conversion (50% x 200)		100
Equivalent production, Average	1,400	1,300
Less work in process, beg.: (200 units)		
Materials (100% x 200)	200	
Conversion (25% x 200)		50
Equivalent production, FIFO	1,200	1,250

Average costing assumes that units processed in any costing period absorb the same amount of materials, labor, and overhead and therefore acquire the same unit cost. Thus, it is necessary to show the elements of materials, labor, and overhead in the beginning inventory in order to facilitate the computation of averages when the beginning work in process costs are merged with the costs of the current period.

First-In, First-Out (FIFO) assumes that units in process at the beginning of the period are to be completed ahead of those that were started in process during the period. Hence the equivalent production of such units will be the work done on them during the period and is equal to the whole unit minus the stage of completion of the unit at the beginning of a costing period.

Based on the foregoing information where the problem is silent as to what method was used and to the mere fact that the equivalent production using the Average method as computed above is none of the choices given (1,400 and 1,300), it was assumed that the FIFO method was used.

PROB. 8-18 *Suggested answer* (c) P7.00

Completed and transferred units	744,000
Add ending work in process	
(60,000 x 40%)	24,000
Equivalent production, Average	768,000

Total production costs (120,000 + 5,256,000)	5,376,000
Divide by equivalent production, Average	768,000
Unit cost of production	7.00

In order to compute the number of equivalent units of current period cost required to complete the units in beginning inventory using the FIFO method, the stage of completion of the units in beginning inventory must be known. Therefore, in its absence, the Average method must be applied.

Under the Average costing method, the cost of each equivalent unit contains a portion of the cost in beginning inventory and a portion of the cost added during the current period. The average cost per equivalent unit for each element of cost is determined by dividing the total cost for each cost element (the amount in beginning inventory plus the amount added during the current period) by the number of equivalent units required to allocate that cost between the units transferred out of the department and units in ending inventory.

PROB. 8-19 *Suggested answer* (c) P548,000

	Materials
Completed and transferred	20,000 gals.
Add work in process, ending inventory (4,000 + 21,000 - 20,000)	5,000 gals.
Equivalent production, Average	25,000 gals.
Equivalent production of ending inventory	5,000 gals.
Multiply by average cost per unit of materials [(P456,000 + 2,284,000)/ 25,000 gallons]	109.60
Cost of raw materials - chemicals in the work in process ending inventory	548,000

Using the average costing method, the cost of each equivalent unit contains a portion of the cost in beginning inventory and a portion of the cost added during the current period. The average cost per equivalent unit for each element of cost is being used to allocate the total production costs between the units competed and units in ending inventory.

PROB. 8-20 *Suggested answer* (d) P24,800

Transferred in costs (5 x 4,000)	20,000
Conversion costs [3 (4,000 x 40%)]	4,800
Total costs assigned to work in process, end	24,800

Given that "materials are introduced at the end of the process in Department Y", no material costs should form part of the work in process inventory at March 31. Again, the average cost per equivalent unit for each element of cost is being used to allocate the total production costs between the units competed and units in ending inventory. On the other hand, the total units placed in process were used to compute the cost per equivalent unit for the transferred in costs.

PROB. 8 -21 *Suggested answer* (d) P0.43

	Materials
Completed units	42,500
Add work in process, end	12,500
Equivalent production, Average	55,000
Total cost of materials (P5,500 + 18,000)	23,500
Divide by equivalent unit of production	55,000
Cost per equivalent unit for materials	0.43

Under the weighted average method, equivalent units of production and cost per unit are based on all work including the beginning work in process done on units completed plus all work done to date on the units in ending work in process. It should be pointed out that since all materials are added at the beginning of the process, both completed units and ending work in process are 100% complete as to materials.

PROB. 8-22 *Suggested answer* (a) P156,000

	Conversion
Completed units	200,000
Add work in process, end	
[(50,000 + 270,000 - 200,000) x 50%]	60,000
Equivalent production, Average	260,000
Less work in process, beginning	
(50,000 x 80%)	40,000
Equivalent production, FIFO	220,000

Equivalent units for conversion in ending work in process inventory	60,000
Multiply by equivalent unit cost of conversion (P572,000/ 220,000)	2.60
Conversion cost of the work in process at the end of May	156,000

Under FIFO costing method, the balance of the units to be accounted for contain only current period costs. As a consequence of this inventory layering method, equivalent units are computed for current period costs only.

PROB. 8-23

a. Suggested answer (c) 4.24

	Materials	Conversion
Completed units (6,000+24,000-8,500)	21,500	21,500
Add work in process, end: (8,500)		
Materials (100% x 8,500)	8,500	
Conversion (10% x 8,500)		850
Equivalent production, Average	30,000	22,350
Less work in process, beg.: (6,000)		
Materials (100% x 6,000)	6,000	
Conversion (70% x 6,000)		4,200
Equivalent production, FIFO	24,000	18,150
Unit cost – conversion (FIFO) (76,956/ 18,150)		4.24

Under the FIFO cost flow assumption, the balance of the units to be accounted for contains only the current period costs. Consequently, equivalent units are computed for current period costs only.

b. Suggested answer (a) 1.83

Unit cost – materials (average) (23,400+31,500/ 30,000)	1.83

Under the average cost flow assumption, the cost of each equivalent unit contains a portion of the cost in beginning work in process and a portion of the cost added during the current period. The average cost per equivalent unit for each element of cost is determined by dividing the total cost for each

cost element by the number of equivalent units required to allocate the cost between the units transferred out and units in ending work in process.

PROB. 8-24 *Suggested answer* (d) P69,000

Total opening work in process (8,000 + 13,000 + 2,000)	23,000
Total materials added (20,000 + 4,000 + 5,000)	29,000
Total conversion costs (10,000 + 10,000 +16,000)	36,000
Total closing work in process (6,000 + 9,000 + 4,000)	(19,000)
Value of the output transferred from Process 3 to the finished goods	69,000

The cost of production report shows the process cost accumulation concepts in recording the charges to producing departments for costs incurred during the period and for transfer of products from one department to another and finally to finished goods inventory.

PROB. 8 - 25

1. *Suggested answer: (a) P 10.00*

2. *Suggested answer: (d) P 7.00*

Beginning work in process inventory	10,000 units
Add units started during the period	30,000 units
Total	40,000 units
Less ending work in process inventory	5,000 units
Units completed during the period	35,000 units

	Materials	Conversion
Units completed	35,000	35,000
Ending inventory (5,000 x 10%)	500	
(5,000 x 25%)		1,250
EUP – Average costing	35,500	36,250

Total costs for Average costing:	355,000	253,750
(103,000 + 252,000)		36,250
(107,500 + 146,250)	35,500	7.00
Divide by EUP – Average costing	**10.00**	
Cost per unit – Average costing		

3. *Suggested answer: (c) P 8.00*

4. *Suggested answer: (a) P 5.00*

	Materials	Conversion
Beginning inventory (10,000 x 60%)	6,000	
(10,000 x 30%)		3,000
Units started and completed	25,000	25,000
Ending inventory (5,000 x 10%)	500	
(5,000 x 25%)		1,250
EUP – FIFO costing	31,500	29,250
Total costs for FIFO costing	252,000	146,250
Divide by EUP – FIFO costing	31,500	29,250
Cost per unit – FIFO costing	**8.00**	**5.00**

PROB. 8-26 *Suggested answer (b) 11,000 units*

Completed units transferred to finished goods	7,000
Units in work in process inventory	4,000
Total units	11,000

In some production process, units are lost through evaporation or some other natural process that does not result from an internal failure. In such cases, the total cost is absorbed directly by the goods units that remain. This is accomplished by adding only surviving units in the equivalent unit computation. In other words, the cost of normal shrinkage and normal continuous losses are handled through the method of neglect, which simply excludes the spoiled units in the equivalent unit schedule. Thus, the production costs for the period in this department is spread proportionately over the work in process and transferred out units.

PROB. 8-27 *Suggested answer (b) 31,000 units*

Completed units	28,500
Defective units at final inspection	2,500
Equivalent units of production, weighted average	31,000

The weighted average method averages the costs in beginning work in process with those incurred during the period, thus, the degree of completion of the beginning work in process is not considered in computing the equivalent units. Note that the ending work in process is only 40% complete as to conversion, while direct materials are added when conversion is 50% complete; thus, no direct materials are not yet added at this point.

PROB. 8-28 Suggested answer (b) P112,000

	Materials	Conversion
Completed and transferred	14,000	14,000
Work in process, end (4,000)		
Materials (100% x 4,000)	4,000	
Conversion (50% x 4,000)		2,000
Equivalent units of production	18,000	16,000

Completed & transferred units		P 14,000
Multiply by total unit cost:		
Materials (P54,000/ 18,000)	P 3.00	
Conversion (P80,000/ 16,000)	5.00	8.00
Total costs transferred to Dept. B		P 112,000

Under the traditional costing system, normal lost units discovered at the start or during the process should not have any equivalent units of production and should have no cost to be accounted by the first department.

PROB. 8-29 *Suggested answer (b) P12,000*

Again, if the cost of lost units is absorbed directly by the good units that remain, as in the case of losses resulting from evaporation or some other natural shrinkage, the loss in normally treated as if it occurs only from current production. Similar to job order cost system, production losses in a process cost system, include scrap, spoilage, and rework. Under both

systems (Job Order and Process Cost System), if the spoilage is the result of an internal failure, the cost should be measured and charged to Factory Overhead Control.

PROB. 8-30 *Suggested answer* (b) 44,000

	Conversion
Completed and transferred	33,000
Abnormal spoilage (100%)	2,000
Work in process, June 30 (15,000 x 60%)	9,000
Equivalent units, Average method	44,000

Under the traditional costing system, abnormal lost units are included in the computation of the equivalent production, to the extent of the stage of completion where the spoilage occurs. Since the spoilage was detected at the end of the process, its equivalent units must be 100% of the spoiled units.

PROB. 8-31 *Suggested answer* (c) P67,500

	Conversion
Completed and transferred	7,000
Spoilage – normal	500
Ending work in process (2,500 x 80%)	2,000
Equivalent production – Average	9,500
Conversion cost per equivalent unit [(P10,000 + 75,500)/ 9,500 units]	P 9.00
Total cost to be accounted for (P10,000 + 75,500)	P 85,500
Less ending work in process (2,500 x 80% x 9)	18,000
Conversion cost transferred to the second production department	P 67,500

Under the traditional costing system, when normal lost units were discovered at the end of the process, the cost of lost units is charged to completed units only and no part of the loss is charged to units still in process. Stated

differently, the absorbing units will be all units except ending work in process. Another approach to solve the above problem is:

Completed and transferred units (7,000 x 9)	P 63,000
Spoiled units (500 x 9)	4,500
Conversion cost transferred	P 67,500

PROB. 8-32 *Suggested answer* (d) Period cost of P30,000, Inventoriable cost of P60,000

Again, normal spoilage (whether continuous or discrete) is an inventoriable cost of production that is charged to cost of goods sold when the units are sold. While abnormal spoilage is a period cost and should be charged to Spoilage or Lost Units or some other current period expense account which is eventually closed to Income and Expense Summary account.

PROB. 8-33 *Suggested answer* (b) P93,600

Total manufacturing cost	P 99,000
Less cost of unsaleable abnormal spoilage (99,000/ 5,500 x 300 units)	5,400
Amount of manufacturing cost to be debited to finished goods	P 93,600

Again, normal spoilage is an inventoriable cost of production that is charged to cost of goods sold when the units are sold. While Abnormal spoilage is a period cost and should be charged to Spoilage or Lost Units or some other current period expense account which is eventually closed to Income and Expense Summary account. Therefore, the cost of unsaleable abnormal spoilage should not be charged to finished goods.

PROB. 8-34 *Suggested answer* (d) P60,000

Abnormal spoilage	P 50,000
Normal spoilage on completed units sold (25,000/50,000 x 20,000)	10,000
Portion of total spoilage that should be charged against revenue	P 60,000

Under the costing system (special production issue: lost units and accretion) introduced at the beginning of this chapter, costs of abnormal losses are accumulated and treated as loss in the period; while the cost of normal losses, whether continuous or discrete, are treated as product cost. Eventually, this product cost will be matched with revenue when sold.

PROB. 8-35

1. *Suggested answer: (c) 3,000 units*

Beginning work in process inventory	10,000 units
Units started during the period	40,000 units
Units completed during the year	(38,000) units
Ending work in process inventory	(5,000) units
Total spoilage	7,000 units
Less normal spoilage	4,000 units
Abnormal spoilage	3,000 units

2. *Suggested answer: (a) 42,650*

3. *Suggested answer: (b) 45,150*

	Materials	Conversion
Units completed	38,000	38,000
Ending inventory (5,000 x 65%)	3,250	
(5,000 x 80%)		4,000
Normal loss (4,000 x 20%)	800	
(4,000 x 45%)		1,800
Abnormal loss (3,000 x 20%)	600	
(3,000 x 45%)		1,350
EUP – Average costing	**42,650**	**45,150**

4. *Suggested answer;: (c) 36,150*

5. *Suggested answer:: (a) 39,150*

	Materials	Conversion
Beginning inventory (10,000 x 35%)	3,500	
(10,000 x 40%)		4,000
Units started and completed	28,000	28,000
Ending inventory (5,000 x 65%)	3,250	
(5,000 x 80%)		4,000
Normal loss (4,000 x 20%)	800	
(4,000 x 45%)		1,800
Abnormal loss (3,000 x 20%)	600	
(3,000 x 45%)		1,350
EUP – FIFO costing	**36,150**	**39,150**

PROB. 8-36

a. *Suggested answer* (c) P3.00

Inventory, October 1, Process C	1,200 units
Received from Process B	2,000 units
Total	3,200 units
Inventory, October 31, Process C	600 units
Completed & transferred to finished goods	2,600 units

	Conversion
Completed units	2,600
Add inventory, October 31 (600 x 1/2)	300
Equivalent production, Average	2,900
Less inventory, October 1 (1,200 x 2/3)	800
Equivalent production, FIFO	2,100
Processing cost per equivalent unit (3,100 + 3,200)/ 2,100 units	3.00

Note that no material was placed in Process C, only labor and overhead.

b. *Suggested answer* (d) P2,400

Cost from preceding department (Process B) [600 units x (P5,000/ 2,000 units)]	1,500
Conversion costs added in Process C (600 units x 1/2 x P3.00 "a")	900
Value of Process C inventory in process on Oct.	2,400

The use of Average method is impossible because, the elements of materials, labor, and overhead in the opening inventory is not shown, thus, the FIFO method was used.

c. *Suggested answer* (a) 2,600 units

Inventory, October 1, Process C	1,200 units
Received from Process B	2,000 units
Total	3,200 units
Inventory, October 31, Process C	600 units
Completed & transferred to finished goods	2,600 units

PROB. 8-37

a. *Suggested answer* (c) P0.48

	Conversion
Completed units	37,000
Add work in process, end: (3,000 x 40%)	1,200
Equivalent production, Average	38,200
Cost per equivalent units for conversion (18,400/ 38,200)	0.48

The Average method does not assume a flow of costs. it assumes that units processed in any one costing period absorb the same amount of materials, labor, and overhead and therefore acquire the same unit cost. To facilitate the computation of averages when the opening work in process costs are merged with the cost of the current period, the elements of materials, labor, and overhead in the opening inventory is necessary.

b. *Suggested answer* (c) P1,530

Ending work in process	3,000 units
Multiply by transferred in cost per unit (P20,400/ 40,000)	0.51
Portion of the total ending work in process attributable to transferred in cost	1,530

PROB. 8-38 *Suggested answer* (d) P 2.78

	Materials	Conversion
Completed units	12,000	12,000
Add work in process, end		
Materials (8,000 x 100%)	8,000	
Conversion (8,000 x 75%)		6,000
Equivalent units (Average)	20,000	18,000

Transferred in costs (P41,000 / 20,000)	2.05
Materials cost (8,000/ 20,000)	0.40
Conversion cost (6,000/ 18,000)	0.33
Total cost per equivalent unit transferred out	2.78

The average cost per equivalent unit for each element of cost is being used to allocate the total production costs between the units competed and units in ending inventory. On the other hand, the total units placed in process were used to compute the cost per equivalent unit for the transferred in costs.

PROB. 8-39 *Suggested answer* (c) 130,000

	Materials
Completed and transferred to Molding Department	85,000
Work in process, March 31	45,000
Equivalent units for materials – Average method	130,000

Under the traditional costing system, units lost at the start or during the process in the first department could not have absorbed any cost and are therefore ignored for costing purposes. Based on the foregoing information where the cost corresponding to the lost units were absorbed by the remaining units using the weighted average method, it was assumed that the units were lost either at the start or during the process. Therefore, for purposes of computing equivalent production, normal lost units discovered at the start or during the process should not have any equivalent units of production.

PROB. 8-40 *Suggested answer* (a) P7,040

Total process costs (P5,100 + 3,000)	P	8,100
Less proceeds from sale of scrap (1,000 x 10% x P1.80_		180
Total process costs to be accounted	P	7,920
Total output to finished goods		800 units
Multiply by cost per unit [P7,920/ (1,000 x 10% + 800)]		8.80
Full cost of finished output that passed the quality control check	P	7,040

Generally, the full amount realized from the sale of scrap and waste can be accounted for in any one of the following several ways, as long as the alternative chosen is used consistently each period: a.) The amount accumulated in Scrap Sales can be closed directly to Income Summary and shown on the income statement under Scrap Sales or Other Income; b.) The amount accumulated can be credited to Cost of Goods Sold, thereby reducing the total cost charged against sales revenue for the period; c.) The amount accumulated can be credited to Factory Overhead Control, thereby reducing the cost of factory overhead for the period; d.) When scrap is directly traceable to an individual job, the amount realized from the sale of scrap can be treated as a reduction in material costs charged to that job. Given that "normal loss is not given a cost, except that whatever scrap value it has is credited to the process account", therefore, it will reduce the total process costs, as shown above.

Chapter 9

ACCOUNTING FOR JOINT AND BY-PRODUCT COSTING

Introduction

There are so many companies that produce and sell more than one type of product. Although companies may engage in multiple production processes to manufacture a variety of products, they may also engage in a single process to simultaneously generate various different outputs.

A single process in which one product cannot be manufactured without producing others is known as a joint process. A joint process simultaneously produces more than one product line. The product lines resulting from a joint process and having a sales value are referred to as, joint products, by-products, and scrap.

Joint products are the primary outputs of a joint process; each joint product individually has substantial revenue-generating ability, and sometimes called primary products, main products, or co-products. In contrast, by-products and scrap are incidental outputs of a joint process. Both are salable, but their sales values alone will not be sufficient for management to justify undertaking the joint process. By-products are viewed as having a higher sales value than scrap.

JOINT COST ALLOCATION TO PRODUCTS

Joint production cost, incurred up to the split off point, can be allocated to joint products under one of the following methods:

1. Joint Products Salable at Split-off

It can be assumed that prices are market values for the products at the split-off point, because they can be sold at that point. In other words, for the joint products salable at the split-off point, the relative sales value is the selling price at split-off.

Market (Sales) Value at Split-off

This method of allocating joint cost to joint products based solely on the relative sales values of the products at the split-off point. Therefore, in order to use this method, all joint products are salable at split-off. Allocation of joint cost is based on weighted market values, that is, using the total market or sales value of each product.

2. Joint Products Not Salable at Split-off

Products not salable in their stage of completion at the split-off point, and therefore without market value, require additional processing to place them in marketable condition. If further processing is needed, the relative sales value may be approximated by deducting the additional anticipated processing and marketing costs from the final sales value to arrive at the estimated net realizable value.

Hypothetical Market Value at Split-off

Where products not salable at split-off point, the basis for allocation of the joint production cost is a *hypothetical market value at the split-off point*. To find a hypothetical market value as the basis for the apportionment, it is necessary to use a working back procedure, whereby the after split-off processing cost is deducted from the ultimate sales value. After split-off marketing and administrative expenses traceable to specific products and an allowance for profit should also be considered, if their amounts are proportionately different among the joint products, because the joint cost apportionment is affected. If in some cases, where certain products are salable at the split-off point while others are not, the market values at the split-off point are used for those that are salable; and for those that are not salable, the hypothetical market values are required.

Net Realizable Value at Split-off

This allocation method assigns cost based on the joint products proportional net realizable values at the point of split-off. It is equal to product sales revenue at split-off minus any costs necessary to prepare and dispose of the product. This method requires that all joint products be marketable at the split-off point, and it considered the additional costs that must be incurred at split-off to realize the estimated sales revenue.

Approximated Net Realizable Value at Split-off

When joint products are not salable at the split-off point, additional processing must take place after split-off, in order for these products to be sold, causing additional costs to be incurred. *Approximated net realizable value at split-off* requires that a simulated net realizable value at the split-off point be calculated. The approximated value is computed on a per product basis as final sales price minus incremental separate cost. Incremental separate cost refers to all costs that are incurred between the split-off point and the point of sale. An underlying assumption of this method is that the incremental revenue from further processing is equal to or greater than the incremental cost of further processing and selling.

3. Average Unit Method

This method allocates the total joint production cost among the various products on the basis of an average unit. Under this method, all products produced by the same process should receive a proportionate share of the total joint cost based on the number of units produced. As long as all units produced are measured in terms of the same unit and do not differ greatly, this method can be used; however, when the units produced are not measured in like terms or the units differ markedly, this method should not be applied.

4. Weighted Average Method

As discussed in preceding section, where the average unit method cannot be applied due to individual units of the various joint products differ markedly, predetermined weight factors often are assigned to each unit, based on such factors as size of the unit, difficulty of manufacture, time consumed in producing the unit, difference in type of labor employed, and amount of materials used.

ACCOUNTING FOR BY-PRODUCTS

The accepted methods for costing by-product fall into two categories: 1.) a joint production cost is not allocated to the by-product, and 2.) some portion of the joint

cost is allocated to the by-product. Under each category, different methods may be used, as shown below.

1. No Joint Cost is Allocated to By-product.
   a. By-product revenue is recognized when sold (Realized value method/Net revenue method). Under this method, the net by-product income is shown as sales revenue or other income.
   b. By-product revenue is recognized when produced (Net realizable value method). Under this method, the net realizable value of by-product is shown as reduction from the joint cost of the main products. If the amount is insignificant, the net realizable value of by-product may be treated as either 1.) other income, 2.) additional sales revenue of main products, 3.) deduction from costs of sales of main products.
2. Joint Cost is Allocated to By-product. (Market value method/Reversal method). Under this method, the allocated cost to the by-product is determined by working back.

SERVICE DEPARTMENT COST ALLOCATION

Costs may be classified in relation to manufacturing department, like, direct departmental charges and indirect departmental charges. Direct departmental charges are costs that are immediately charged to the particular manufacturing department that incurred the costs since the costs can be conveniently identified or associated with the department that benefited from the said costs. Indirect departmental charges are costs that are originally charged to some manufacturing department or account but are later allocated or transferred to another department that indirectly benefited from said costs.

The number and types of service departments in a company depend on the company's operations and the degree of cost control desired. All service department costs are incurred to support production or service rendering activities; thus, support department costs must be covered by the sales of products and services.

Service department costs should be allocated either to producing departments and service departments, or just to producing departments, on the basis of a common unit of measure that correlates closely with the causes of service department costs. The

costs of service departments ultimately are allocated to producing departments to establish predetermined factory overhead rates. This is being done to meet the objectives of full cost computations, managerial motivation, and managerial decision making.

The allocation process for service department costs is a process of pooling, allocating, repooling, and reallocating. When service departments are considered in the pooling process, the primary pools are composed of all costs of both the revenue-producing and service departments. These costs can be gathered and specified by cost behavior (variable and fixed) or in total. Depending on the type of allocation method, one or more layers of intermediate pools are then developed in the allocation process; however, the last layer will consist of only revenue-producing departments. The cost of the intermediate pools are distributed to final cost objects (such as products and services) using specified, rational cost driver allocation bases (such as machine hours, direct labor hours, machine through-put time, or number of machine set-ups). The pooled service department costs can be allocated to revenue-producing department using the following methods:

1. **Direct Method**

   This method is the simplest and most common. Under this method, service department costs are directly assigned only to the revenue-producing areas, based on their relative use of services, without recognition of services provided among the service departments. No attempt is made to allocate the costs of service departments to other service departments,

2. **Step-Down Method**

   This method transfers the costs of service departments by a sequence of steps in a prescribed order by department, and sometimes called the *Sequential method*, because costs are allocated from service department in a predetermined sequence. Once cost is allocated from a service department, no other service department's cost is allocated back to it in a subsequent step. To use this method, a particular order must be decided on for allocating the service department's costs because the order of departments does make a difference in the calculation.

   One approach is to begin with the costs of the service department that provides the highest percentage of its total services to other service departments. An alternative is to begin with the costs of the service department providing services to the greatest number of other service departments. And another possibility is to start with the service department

having the greatest cost of services provided to other service departments. The cost of the remaining service departments are then allocated in the same manner, but no cost is assigned to service departments whose costs have already been allocated. The process continues until all service department costs are allocated.

3. Reciprocal Method

This method is the most theoretically sound. It allows reflection of all reciprocal services among the service departments. It is also known as the *Simultaneous Solution* method, *Cross Allocation* method, *Matrix Allocation* method, *Double Distribution* method, *or Algebraic Allocation* method.

When service departments serve each other, the step method prorates incompletely because one department is distributed before another – therefore, before receiving any cost proration from the other. Although the resulting difference in the final costs of a producing department may or may not be significant, the direct method and the step method fail to measure the total cost of individual service departments, which is useful for product costing and cost control.

The reciprocal method considers completely all interrelationships among the service departments. It involves formulating a set of equations that reflect reciprocal relationships among departments. Solving these equations simultaneously recognizes the fact that cost flow both into and out of each department.

The starting point under this method is a review of the bases used for allocation and the respective amounts of those bases for each department. A schedule is created that shows the proportionate usage by each department of other departments' services. These proportions are then used to develop equations that, when solved simultaneously, will give cost allocations that fully recognize the reciprocal services provided. The amounts provided by these equations are used to reallocate costs among all the departments; costs will then be assigned only to the revenue-producing areas.

Regardless of the method used to allocate service department costs, the final step is to determine the overhead application rates for the revenue-producing areas. Once service department costs have been assigned to production, they are included as part of production overhead and allocated to products or jobs through normal overhead assignment procedures.

MULTIPLE CHOICE – Theory of Accounts

TOA 9-1 (Adapted)

The allocation of joint costs to individual products is useful primarily for purposes of

a. Determining whether to produce one of the joint products.
b. Inventory costing.
c. Determining the best market price.
d. Evaluating whether an output is a main product or a by-product.

TOA 9-2 (Adapted)

The method used for the allocation of joint costs to products is important

a. Only in the minds of accountants.
b. Because profits will be affected when ending inventories change from the beginning of the period.
c. Because its validity for justifying prices before regulatory authorities is unquestioned.
d. Because profit margins differ when the relative sales value method is used.

TOA 9-3 (Adapted)

If a company obtains two salable products from the refining of one ore, the refining process should be accounted for as a(an)

a. Mixed cost process
b. Joint process
c. Extractive process
d. Reduction process

TOA 9-4 (Adapted)

Joint costs are most frequently allocated based upon relative

a. Profitability.
b. Conversion costs.
c. Prime costs.
d. Sales value.

TOA 9-5 (Adapted)

In joint-product costing and analysis, which one of the following costs is relevant when deciding the point at which a product should be sold to maximize profits?

a. Separable costs after the split-off point.
b. Joint costs to the split off point.
c. Sales salaries for the period when the units were produced.
d. Purchase costs of the materials required for the joint products.

TOA 9-6 (Adapted)

A company produces three products from a joint process. The products can be sold at split-off or process further. In deciding whether to sell at split-off or process further, management should

a. Allocate the joint cost to the products based on relative sales value prior to making the decision.
b. Allocate the joint cost to the products based on a physical quantity measure prior to making the decision.
c. Subtract the joint cost from the total sales value of the product before determining relative sales value and making the decision.
d. Ignore the joint cost in making the decision.

TOA 9-7 (Adapted)

Which of the following components of production are allocable as joint costs when a single manufacturing process produces several salable products?

a. Direct materials, direct labor, and overhead.
b. Direct materials and direct labor only.
c. Direct labor and overhead only.
d. Overhead and direct materials only.

TOA 9-8 (Adapted)

For purposes of allocating joint costs to joint products using the relative sales value at split-off method, the costs beyond split-off

a. Are allocated in the same manner as the joint costs.

b. Are deducted from the relative sales value at split-off.
c. Are deducted from the sales value at the point of sale.
d. Do not affect the allocation of the joint costs.

TOA 9-9 (Adapted)

Relative sales value at split-off is used to allocate:

	Cost beyond split-off	Joint costs
a.	Yes	No
b.	No	Yes
c.	No	No
d.	Yes	Yes

TOA 9-10 (Adapted)

Products of relatively small total value that are produced simultaneously from a common manufacturing process with products of greater value and quantity are
a. Scrap
b. By-products
c. Waste
d. Abnormal spoilage

TOA 9-11 (Adapted)

In a joint production process, a by-product is also described as
a. A simultaneously produced product of relatively low value.
b. A form of main product with controllable production proportions.
c. Products of low value recovered at the end of a production process.
d. A product with no value contribution to help offset production costs.

TOA 9-12 (Adapted)

A company produces three main products and one by-product. The by-product's relative market value is quite low compared to that of the main products. The preferable accounting for the by-product's net realizable value is as

a. An addition to the revenues of the other products allocated on their respective net realizable values.
b. Revenue in the period in which it is sold.
c. A reduction in the joint cost to be allocated to the three main products.
d. A separate net realizable value upon which to allocate some of the joint costs.

TOA 9-13 (Adapted)

The following is acceptable regarding the allocation of joint product cost to a by-product

	None Allocated	Some Portion Allocated
a.	Not acceptable	Not acceptable
b.	Acceptable	Acceptable
c.	Acceptable	Not acceptable
d.	Not acceptable	Acceptable

TOA 9-14 (Adapted)

Because this allocation method recognizes that service departments often provide each other with interdepartmental services, it is theoretically considered to be the most accurate method for allocating service department costs to production departments. This method is the

a. Direct method
b. Variable method
c. Reciprocal method
d. Linear method

TOA 9-15 (Adapted)

In allocating factory service department costs to producing departments, which of the following items would most likely be used as an activity base?

a. Units of product sold.
b. Salary of service department employees.
c. Units of electric power consumed.
d. Direct materials usage.

TOA 9-16 (Adapted)

This method of service department costs allocation is also called sequential method that allocates the costs of some service departments to other service departments, but once a service department's costs have been allocated, no subsequent costs are allocated back to it.

a. Direct method
b. Reciprocal method
c. Step-down method
d. Bottom-top method

TOA 9-17 (Adapted)

If the net realizable value of the by-product of a joint production process is significant, how shall it be accounted for?

a. The net realizable value of the by-product shall be recorded as deduction from the total joint manufacturing cost thereby reducing the cost of the main products also known as replacement cost method.
b. The net realizable value of the by-product shall be recorded as deduction from the net sales of the main product.
c. The net realizable value of the by-product shall be recorded as deduction from the cost of sales of the main product.
d. The net realizable value of the by-product shall be recorded as other income.

MULTIPLE CHOICE - Problems

PROB. 9-1 (Adapted)

A company processes raw material into Products F1, F2, and F3. Each ton of raw materials produces five units of F1, two units of F2, and three units of F3. Joint processing costs to the split-off point are P15 per ton. Further processing results in the following per unit figures:

	F1	F2	F3
Additional processing costs per unit	P 28	P 30	P 25
Selling price per unit	30	35	35

If joint costs are allocated by the net realizable value of finished product, what proportion of joint costs should be allocated to F1?

a. 20%
b. 30%
c. 33 1/3%
d. 50%

PROB. 9-2 (Adapted)

Sheltex Corp. processes materials and recovers Product Shell and Caltex. The cost of buying 600,000 gallons of direct materials, and processing these up to split-off point will yield 300,000 gallons of Shell and 270,000 gallons, net of 30,000 gallons evaporation, at a total production costs of P17,100,000. The selling price of Shell is P500 per gallon and P400 per gallon for Caltex. Records show that on May 1, there were 24,000 gallons of Shell and 15,000 gallons of Caltex; and at the end of May, there were 36,000 gallons of Shell and 39,000 gallons of Caltex. Using the quantitative unit method of allocating joint production costs, what would be the allocated cost for Product Shell and Caltex, respectively?

a. 8,100,000 9,000,000
b. 8,550,000 8,550,000
c. 8,700,000 8,400,000
d. 9,000,000 8,100,000

PROB. 9-3 (Adapted)

China Manufacturing Corp. produces three products from the same process and incurs joint processing costs of P60,000. The following information is available for the month:

	Gallons	Further Processing cost	Final SP/ Gal.	SP/gal. @ split off	Disposal Cost/gallon @ split off	Disposal Cost/gallon Process Further
M	25,000	3.00	7.00	3.60	2.00	1.00
C	20,000	5.75	10.00	5.00	2.25	2.00
T	5,000	1.50	8.00	2.00	1.00	0.50

a. What amount of the joint processing cost is allocated to the three products using the physical measure allocation?

	M	C	T
a.	25,000	20,000	15,000
b.	30,000	15,000	15,000
c.	30,000	24,000	6,000
d.	20,000	20,000	20,000

b. What amount of the joint processing cost is allocated to the three products using the sales value at split off?

	M	C	T
a.	24,000	33,000	3,000
b.	27,000	30,000	3,000
c.	30,000	18,000	12,000
d.	20,000	20,000	20,000

c. What amount of the joint processing cost is allocated to the three products using the net realizable value at split off?

	M	C	T
a.	24,000	33,000	3,000
b.	27,000	30,000	3,000
c.	30,000	18,000	12,000
d.	20,000	20,000	20,000

d. What amount of the joint processing cost is allocated to the three products using the approximated net realizable value at split off?

	M	C	T
a.	24,000	33,000	3,000
b.	27,000	30,000	3,000

c.	30,000	18,000	12,000
d.	20,000	20,000	20,000

PROB. 9-4 (Adapted)

Idaho Corp. manufactures liquid chemicals A and B from a joint process. Joint costs are allocated on the basis of relative market value at split-off. It costs P4,560 to process 500 gallons of Product A and 1,000 gallons of Product B to the split-off point. The market value at split-off is P10 per gallon for Product A and P14 for Product B. Product B requires an additional process beyond split-off at a cost of P2 per gallon before it can be sold. What is Idaho's cost to product 1,000 gallons of Product B?

a. 5,040
b. 4,360
c. 4,860
d. 5,360

PROB. 9-5 (RPCPA)

Dennis Manufacturing Co. manufactures two joint products. Product A sells at P30, while Product B sells at P60. The company uses the net realizable value method for allocating joint costs. For the month of June, the production activities were as follows:

Joint product costs:	
Raw materials	30,000
Direct labor	15,000
Factory overhead	10,000

Further processing costs after the split-off point in order to finish the products into their final form were P24,000 for Product A and P36,000 for Product B. Total number of units produced during the month were 2,000 for Product A and 1,000 for Product B. The joint cost allocated to A was:

a. 22,000
b. 33,000
c. 27,500
d. Answer not given

PROB. 9-6 (RPCPA)

Lego Plastic, Inc. has two joint products, Abba and Adda, and uses the net realizable value method of allocating joint costs. The total joint costs for May amounted to P300,000. During the month, additional processing costs after split-off were P160,000 for Abba and P240,000 for Adda. Lego produced 16,000 units of Abba and 8,000 units of Adda during the month. The sales value of Abba is P500 per unit and for Adda is P1,000 per unit. The portion of Joint costs allocated to Adda during the month is:

a. 175,000
b. 180,000
c. 225,000
d. 150,000

PROB. 9-7 (RPCPA)

Joie Co. manufactures two joint products (Ralin and Stalin). Joie produced 12,000 units of Ralin with an after split-off sales value of P45,000. However, if Ralin were to be processed further, additional cost of P6,000 will be incurred but the sale value will increase to P60,000. Joie produced 6,000 units of Stalin with an after split-off sales value of P30,000.

However, if Stalin were to be further processed, additional cost of P3,000 will be incurred but the sale value will go up to P36,000. Under the relative sales value at split-off approach, the allocation to Ralin from total product cost is P27,000. What is the total product cost?

a. 75,000
b. 45,000
c. 27,000
d. 67,500

PROB. 9-8 (RPCPA)

A chemical company which uses a joint process manufactures products O, P, and M, which are all derived from one input. The company allocates joint costs to the products in proportion to the relative physical volume of output. The company may either sell the products at the point of split-off or process further in order to maximize profits. The following data were obtained for February:

	No. of units produced	Sales price/unit at split-off	If processed further: Sales price per unit	If processed further: Additional cost per unit
O	2,000	P 4.00	P 5.00	P 0.80
P	3,000	2.25	4.00	1.50
M	1,500	3.00	3.75	0.90

Joint production costs were P15,000. Additional processing on products O and P were performed, while product M was sold at the point of split-off. The gross profit of the company derived from the production process for the month of February was:

a. 4,250
b. 5,175
c. 5,400
d. 6,525

PROB. 9-9 (AICPA)

The following information pertains to a by-product called Moy:

Sales in May	5,000 units
Selling price per unit	P 6.00
Selling costs per unit	2.00
Processing costs	0

Inventory of Moy was recorded at net realizable value when produced in April. No units of Moy were produced in May. What amount should be recognized as profit on Moy's May sales?

a. 0
b. 10,000
c. 20,000
d. 30,000

PROB. 9-10 (Adapted)

Lane Co. produces main products Kul and Wu. The process also yields by-product Zef. Net realizable value of by-product Zef is subtracted from joint

production cost of Kul and Wu. The following information pertains to production in July at a joint cost of P54,000:

Product	Units Produced	Market Value	Additional cost after split-off
Kul	1,000	P 40,000	P 0
Wu	1,500	35,000	0
Zef	500	7,000	3,000

If Lane uses the net realizable value method for allocating joint cost, how much of the joint cost should be allocated to product Kul?

a. 18,800
b. 20,000
c. 26,667
d. 27,342

'ROB. 9-11 (AICPA)

Mig Co., which began operations in January 2, produces gasoline and a gasoline by-product. The following information is available pertaining to January sales and production:

Total production costs to split-off point		120,000
Gasoline sales		270,000
By-product sales		30,000
Gasoline inventory, January 31:		15,000
Additional by-product costs:		
Marketing	10,000	
Production	15,000	

Mig accounts for the by-product at the time of production. What are Mig's January cost of sales for gasoline and the by-product?

	Gasoline	By-product
a.	105,000	25,000
b.	115,000	0
c.	108,000	37,000
d.	100,000	0

PROB. 9-12 (AICPA)

Lite Co. manufactures Products X and Y from a joint process that also yields a by-product, Z. Revenue from sales of Z is treated as a reduction of joint costs. Additional information is as follows:

	PRODUCTS			
	X	Y	Z	Total
Units produced	20,000	20,000	10,000	50,000
Joint costs	?	?	?	262,000
Sales value at split-off	300,000	150,000	10,000	460,000

Joint costs were allocated using the sales value at split-off approach. The joint costs allocated to Product X were

a. 75,000
b. 100,000
c. 150,000
d. 168,000

PROB. 9-13 (Adapted)

High Tets Chemicals, Inc. produces Product Love and Potion from a process and incident to their production recovers a by-product, No. One. The net realizable value of the by-product, No. One is treated as reduction of the joint production costs. For the month of October, the joint costs of processing amounted to P1,152,000. Additional information is shown below:

Product	Production	Market value
Love	550,000	P 900,000
Potion	825,000	600,000
No. One	275,000	126,000

An additional processing costs of P54,000 was spent to complete the processing of No. One. Using the net realizable value method for allocating joint production costs, what would be the amount of joint costs allocated to Product Love?

a. 540,000
b. 648,000
c. 662,400
d. 810,000

PROB. 9-14 (RPCPA)

Fortune Producers manufactures three joint products, JKA, JKB, and JKC, and by-product, JJD, all in a single process. Results for the month of July were as follows:

Materials used, 10,000 kgs.	P 24,000
Conversion cost	28,000

OUTPUT

Product	Kilos	Sales value/kilo
JKA	4,000	P 11.00
JKB	3,000	10.00
JKC	1,000	26.00
JJD	2,000	1.00

The revenue from the by-product is credited to the sales account. Process costs are apportioned on a relative sales value approach. What was the cost per kilo of JKA for the month?

a. 5.72
b. 5.61
c. 5.50
d. 5.20

PROB. 9-15 (AICPA)

Atlas Foods produces the following three supplemental food products simultaneously through a refining process costing P93,000.

Alfa	10,000 pound of Alfa, a popular but relatively rare grain supplement having a caloric value of 4,400 calories per pounds.
Betters	5,000 pounds of Betters, a flavoring materials high in carbohydrates with a caloric value of 11,200 calories per pound.

Morefeeds	1,000 pounds of Morefeeds, used as a cattle feed supplement with a caloric value of 1,000 calories per pound.

The joint products, Alfa, and Betters have a final selling price of P4 per pound and P10 per pound, respectively, after additional processing costs of P2 per pound of each product are incurred after the split-off point. Morefeeds, a by-product, is sold at the split-off point for P3 per pound.

a. Assuming Atlas Foods inventories Morefeeds, the by-product, the joint cost to be allocated to Alfa, using the net realizable value method is
   a. 3,000
   b. 30,000
   c. 31,000
   d. 60,000

b. Assuming Atlas Foods inventories Morefeed, the by-product, the joint cost to be allocated to Alfa, using the physical quantity method is
   a. 3,000
   b. 30,000
   c. 31,000
   d. 60,000

c. Assuming Atlas Foods inventories Morefeed, the by-product, the joint cost to be allocated to Betters using the weighted quantity method based on caloric value per pound is
   a. 39,208
   b. 39,600
   c. 40,920
   d. 50,400

d. Assuming Atlas Foods inventories Morefeed, the by-product, the joint cost to be allocated to Alfa using the gross market value method is
   a. 36,000
   b. 40,000
   c. 41,333
   d. 50,000

e. Assuming Atlas Foods does not inventory Morefeed, the by-product, the joint cost to be allocated to Betters using the net realizable value method is
   a. 30,000
   b. 31,000
   c. 52,080
   d. 62,000

PROB. 9-16 (AICPA)

Eagle Corp. manufactures a product that gives rise to a by-product called Pag-asa. The only costs associated with Pag-asa are selling costs of P1.00 for each unit sold. Eagle accounts for Pag-asa sales first by deducting its separable costs from such sales and then by deducting this net amount from costs of sales of the major product. During the year, 1,000 units of Pag-asa were sold for P4.00 each.

a. If Eagle changes its method of accounting for Pag-asa sales by recording the net amount as additional sales revenue, what is the gross margin?
   a. Unaffected
   b. Increase by P3,000
   c. Decrease by P3,000
   d. Increase by P4,000

b. If Eagle changes its method of accounting for Pag-asa sales by recording the net amount as other income, what is the gross margin?
   a. Unaffected
   b. Increase by P3,000
   c. Decrease by P3,000
   d. Decrease by P4,000

c. If Eagle records the net realizable value of Pag-asa as inventory as it is produced, what is the per unit value?
   a. 1.00
   b. 2.00
   c. 3.00
   d. 4.00

PROB. 9-17 (AICPA)

The managers of Rochester Manufacturing are discussing ways to allocate the cost of service departments such as: Quality Control and Maintenance to the production departments. To aid them in this discussion, the controller has provided the following information:

Budgeted	Quality Control	Maintenance	Machining	Assembly	Total
Overhead costs before allocation	350,000	200,000	400,000	300,000	1,250,000
Machine hours			50,000		50,000
Direct labor hours				25,000	25,000
Hrs of services:					
Quality control		7,000	21,000	7,000	35,000
Maintenance	10,000		18,000	12,000	40,000

a) If Rochester Manufacturing uses the direct method of allocating service departments, the total service costs allocated to the assembly department would be
   a. 80,000
   b. 87,500
   c. 120,000
   d. 167,500

b) If Rochester Manufacturing uses the step down method of allocating service costs beginning with quality control, the maintenance costs allocated to the assembly department would be
   a. 70,000
   b. 108,000
   c. 162,000
   d. 200,000

c) If Rochester Manufacturing uses the reciprocal method of allocating service costs, the total amount of quality control costs (rounded to the nearest amount) to be allocated to the other departments would be
   a. 284,211
   b. 336,842
   c. 350,000
   d. 421,053

PROB. 9-18 (Adapted)

Worx Corp. has three service departments that support the production area. Outlined below is the estimated overhead by department for the upcoming year.

Service Departments	Estimated Overhead	Number of employees
Receiving	P 25,000	2
Repair	35,000	2
Tool	10,000	1
Production Departments		
Assembly		25
Bolting		12

The Repair Department supports the greatest number of departments, followed by Tool Department. Overhead cost is allocated to departments based upon the number of employees.

a. Using the direct method of allocation, how much of the Repair Department's overhead will be allocated to the Tool Department?
   a. 0
   b. 875
   c. 7,000
   d. 11,667

b. Using the step-down method of allocation, the allocation from the Repair Department to the Tool Department would be
   a. 0
   b. 875
   c. 7,000
   d. 11,667

PROB. 9-19 (Adapted)

SP Company has two service departments, S1 and S2, and two production departments, P1 and P2. Departmental data for the month of January were as follows:

	S1	S2
Cost incurred:	P 27,000	P 18,000
Service provided to:		
S1	------	20%
S2	10%	------
P1	50%	30%
P2	40%	50%

What are the total allocated service department costs to P2 if the company uses the reciprocal method of allocating its service department costs? (Round your answers to the nearest whole number.)

a. 19,800
b. 21,949
c. 22,500
d. 23,061

ANSWERS – Theory of Accounts

TOA 9-1 *Suggested answer (b) Inventory costing*

Joint cost includes all costs incurred up to the split off point for direct material, direct labor, and overhead. Joint cost is allocated, at split off point, to the joint products only. Allocation is necessary because of the cost principle. Joint cost is a necessary and reasonable cost of producing the joint products and, therefore, should be attached to them.

TOA 9-2 *Suggested answer (b) Because profits will be affected when ending inventories change from the beginning of the period.*

Assignment of costs to these various products is required for inventory costing, for income determination, and for financial statement purposes. By product and joint product costing also furnishes management with data that can be useful in planning maximum profit potentials and evaluating actual profit performance.

TOA 9-3 *Suggested answer (b) joint process*

A single process in which one product cannot be manufactured without producing others is known as a joint process.

TOA 9-4 *Suggested answer (d) sales value*

Generally, joint costs may be allocated based on the following: 1.) Physical measure allocation, 2.) Monetary measure allocation. Physical measure allocation includes tons of ore in mining, linear board feet in lumber milling, barrels of oil in petroleum refining, etc.

Monetary measure allocation includes sales value at split-off, net realizable value at split-off, approximated net realizable value at split-off.

The sales value at split-off allocation assigns joint cost to joint products based solely on relative sales value of the products at the split-off point.

TOA 9-5 *Suggested answer (a) Separable costs after the split-off point.*

Joint products are created from processing a common input. Common costs are incurred prior to the split-off point and cannot be identified with a particular joint product. As a result, common costs are irrelevant to the timing of the sale. However, separable costs incurred after the split-off point are relevant because, if incremental revenues exceed the separable costs, products should be processed further and should not be sold at the split-off point.

TOA 9-6 *Suggested answer (d) ignore the joint cost in making the decision.*

The cost incurred for materials, labor and overhead during a joint process are referred to as the joint cost of the production process. Although joint cost allocations are necessary to determine financial statement valuations, such allocations should not be used in internal decision making. Since joint costs are production costs incurred prior to split-off point, the joint cost allocation is not relevant to decision making. Once the split-off point is reached, the joint cost has already been incurred and is a sunk cost that cannot be changed no matter future course of action is taken.

TOA 9-7 *Suggested answer (a) direct materials, direct labor, and overhead*

Joint cost includes all cost incurred up to the split-off point for direct materials, direct labor, and overhead.

TOA 9-8 *Suggested answer (d) do not affect the allocation of the joint costs.*

If any of the joint process outputs are processed further, additional joint costs after split-off will be incurred. Any costs after split-off are assigned to the separate products for which those costs are incurred, and therefore, not allocated to joint products in a manner similar to joint costs.

TOA 9-9 *Suggested answer (b) No Yes*

The total production cost of multiple products involves both joint cost and separable cost/cost beyond split-off. Joint production cost requires allocation or assignment to the individual products; while separable costs are identifiable with the individual product and generally need no allocation.

TOA 9-10 *Suggested answer (b) By-products*

The term by-product is generally used to denote a product of relatively small total value that is produced simultaneously with a product of greater total value.

TOA 9-11 *Suggested answer (a) A simultaneously produced product of relatively low value.*

Again, the term by-product is generally used to denote a product of relatively small total value that is produced simultaneously with a product of greater total value. While, the product with greater value and usually produced in greater quantities than the by-product is commonly called the main product.

TOA 9-12 *Suggested answer (c) A reduction in the joint cost to be allocated to the three main products*

Under the net realizable value method of accounting by-product, the net realizable value of by-product is shown as reduction from the joint cost of main products.

TOA 9-13 *Suggested answer (b) Acceptable Acceptable*

The accepted methods for costing by-product fall into two categories. In the first category, a joint production cost is not allocated to the by-product; while in the second category, some portion of the joint production cost is allocated to the by-product.

TOA 9-14 *Suggested answer (c) Reciprocal method*

The three most common methods of allocating service department costs are the direct method, step-down method, and reciprocal method. The reciprocal method is theoretically the preferred method because it recognizes reciprocal services among service departments.

TOA 9-15 *Suggested answer (c) Units of electric power consumed*

Service department costs are considered part of factory overhead and should be allocated to the production departments that use the services. A basis reflecting cause and effect should be used to allocate service department costs. In this case, the number of kilowatt hours used by each producing department is probably the best allocation base for electricity costs.

TOA 9-16 *Suggested answer: (c) Step-down method*

TOA 9-17 *Suggested answer: (a) This is also known as replacement cost method*

SOLUTIONS - Problems

PROB. 9-1 *Suggested answer (a) 20%*

	NRV		Allocation
F1 (28-30 x 5)	10	**20%**	3,000
F2 (30-35 x 2)	10	20%	3,000
F3 (25-35 x 3)	30	60%	9,000
	50		15,000

In many industries, individual units of the various joint products differ markedly. For this reason, predetermined weighted factors often are assigned to each unit based on such factors as size of the unit, difficulty of manufacture, time consumed in making the unit, difference in type of labor employed, and amount of materials used. Finished production of every kind is multiplied by weighted factors to apportion the total joint cost to individual units. This approach may be used to determine the factors in using the net realizable value method of allocating the joint production cost.

PROB. 9-2 *Suggested answer* (d) P9,000,000 P8,100,000

Product	Units produced		Allocated cost
Shell	300,000	30/57	9,000,000
Caltex	270,000	27/57	8,100,000
	570,000		17,100,000

The quantitative unit method attempts to distribute the total joint production costs on the basis of some common unit of measurement, such as pounds, gallons, tons, or board feet. If the joint products are not measurable by the basic measurement unit, the joint units must be converted to a denominator common to all units produced.

PROB. 9-3

a. *Suggested answer* (c) P30,000 P24,000 P6,000

	Gallons		Allocation
M	25,000	25/50	30,000
C	20,000	20/50	24,000
T	5,000	5/50	6,000
	50,000		60,000

Physical measurement allocation uses a common physical characteristic of the joint product as proration base; in this case, gallons.

b. *Suggested answer* (b) P27,000 P30,000 P3,000

		SP @ split off		Allocation
M	(25,000 x 3.60)	90,000	90/200	27,000
C	(20,000 x 5.00)	100,000	100/200	30,000
T	(5,000 x 2.00)	10,000	10/200	3,000
		200,000		60,000

Sales value at split off allocation assigns joint cost to joint products based solely on relative sales value of the products at split off point; thus to use this method, all joint products must be marketable at split off.

c. *Suggested answer* (a) P24,000 P33,000 P3,000

		NRV @ split off		Allocation
M	25,000 x (3.60-2.00)	40,000	40/100	24,000
C	20,000 x (5.00-2.25)	55,000	55/100	33,000
T	5,000 x (2.00 -1.00)	5,000	5/100	3,000
		100,000		60,000

The net realizable value at split off allocation method assigns joint cost based on the joint products' proportional net realizable value at split off point. Net realizable value is equal to product sales revenue at split off minus any costs necessary to prepare and dispose of the product.

d. *Suggested answer* (c) P30,000 P18,000 P12,000

		Approx. NRV @ split off		Allocation
M	25,000 x (7.00-3.00-1.00)	75,000	75/150	30,000
C	20,000 x (10.00-5.75-2.00)	45,000	45/150	18,000
T	5,000 x (8.00-1.50-0.50)	30,000	30/150	12,000
		150,000		60,000

Approximated net realizable value at split off allocation requires that a simulated net realizable value at the split off point be calculated. This approximated value is computed on per product basis as final sales price minus incremental separate costs. Incremental separate costs refer to all costs that are incurred between the split off point and the point of sale.

PROB. 9-4 *Suggested answer (d) 5,360*

	MV		Allocation
Product A (500 x 10)	5,000	5/19	1,200
Product B (1,000 x 14)	14,000	14/19	3,360
	19,000		4,560

Allocated joint cost – Product B	3,360
Additional processing cost (1,000 x 2)	2,000
Total cost to produce Product B	5,360

The chief characteristic of a joint cost is the fact that the cost of several different products is incurred in an indivisible sum for all products, rather than individual amounts for each product. The total production cost of multiple products involves both joint cost and separate, individual product costs. These separable product costs are not allocated, however, a joint production cost requires allocation to the individual products.

PROB. 9-5 *Suggested answer* (b) P33,000

	Product A	Product B	Total
Sales price:			
(2,000 x 30)	60,000		
(1,000 x 60)		60,000	120,000
Less further processing costs	24,000	36,000	60,000
Net realizable value	36,000	24,000	60,000

	NRV		Allocation
Product A	36,000	36/60	33,000
Product B	24,000	24/60	22,000
Total	60,000		55,000

Again, the net realizable value at split off allocation of joint cost assigns the joint cost based on the joint products' proportional net realizable values at the point of split off. Net realizable value is equal to product sales revenue minus any costs necessary to prepare and dispose of the product.

PROB. 9-6 *Suggested answer* (d) P150,000

	NRV		Allocation
Abba			
(500 x 16,000) - 160,000]	7,840,000	50%	150,000
Adda			
[(1,000 x 8,000) - 240,000]	7,760,000	50%	150,000
	15,600,000		300,000

Under the net realizable value method of allocating joint production costs, allocation should be based on the sales value of the products after further processing costs (any cost to prepare and dispose of the product).

PROB. 9-7 *Suggested answer* (b) P45,000

Product	Sales value at split-off		Allocated cost
Ralin	45,000	45/75	27,000
Stalin	30,000	30/75	18,000
	75,000		45,000

Based on the foregoing information, allocation of joint production costs was based on the relative value at split-off, thus, to determine the total joint product cost, the amount of P27,000 (allocated product cost to Ralin) must be divided by the related fraction (45/75) developed from the sales value at split-off of main products. Incidentally, the allocated cost to Stalin should be P18,000, as shown above.

PROB. 9-8 *Suggested answer* (c) P5,400

Sales revenue:		
Product O (2,000 x 5.00)	10,000	
Product P (3,000 x 4.00)	12,000	
Product M (1,500 x 3.00)	4,500	26,500
Less production costs:		
Joint production costs:		
Product O (2,000/6,500 x 15,000)	4,615	
Product P (3,000/6,500 x 15,000)	6,923	
Product M (1,500/6,500 x 15,000)	3,462	
Further processing costs:		
Product O (2,000 x 0.80)	1,600	
Product P (3,000 x 1.50)	4,500	21,100
Gross profit for the month of February		5,400

The quantitative (physical unit) method of allocating joint production cost attempts to distribute the joint costs to products based on a physical measure of units. Under this method, each unit of each product is assigned of the same value regardless of the nature or value of the product.

The total production cost of multiple products involves both joint cost and separate individual product costs. These separable product costs are identifiable with the individual product and, generally, need not be allocated. Based on the foregoing information, Product M was sold at the point of split-off, thus, no further process cost was considered.

PROB. 9-9 *Suggested answer* (a) P 0

Since the inventory of the by-product was recorded at net realizable value when produced in April, and likewise, when the units of the by-product were sold in May, the proceeds equaled the inventory cost plus disposal costs, thus, no profit will be recognized in May.

PROB. 9-10 *Suggested answer* (c) P26,667

Total joint cost	54,000
Less net realizable value of by-product (P7,000 - 3,000)	4,000
Joint cost to be allocated to main products	50,000

Main product	Sales value at split-off		Joint cost allocated
Kul	40,000	40/75	26,667
Wu	35,000	35/75	23,333
	75,000		50,000

The use of the net realizable value (or offset) approach of accounting the by-product requires that the net realizable value (selling price of by-product minus further processing and disposal costs) be treated as a reduction in the joint cost of manufacturing the primary products. On the other hand, the net realizable value at split off allocation of joint cost assigns the joint cost based on the joint products' proportional net realizable values at the point of split off. Net realizable value is equal to product sales revenue minus any costs necessary to prepare and dispose of the product.

PROB. 9-11 *Suggested answer* (d) P100,000 P 0

Total joint production costs	120,000
Less net realizable value of by-product [30,000 - (10,000 + 15,000)]	5,000
Net production cost	115,000
Less gasoline inventory, January 31	15,000
Cost of sales for gasoline	100,000

Under the production method, where the by-product is accounted at the time of production, the net realizable value of the by-product produced is deducted from the cost of the main products produced. Therefore, no cost of sales is reported for the by-product, and the total joint production costs will be reduced by the net realizable value of the by-product, thereby reducing the cost of sales of the main product.

Product	Sales value at split-off		Allocated cost
X	300,000	30/45	168,000
Y	150,000	15/45	84,000
Total	450,000		252,000

Based on the foregoing information, the revenue from sales of by-product is treated as a reduction of joint costs, thus the amount of joint costs to be allocated to main products is P252,000 (P262,000 - 10,000). Also note, the basis of allocation is the sales value at split-off of the main products, thus the above computations.

PROB. 9-13 *Suggested answer* (b) P648,000

Product	Market value		Allocated cost
Love	900,000	9/15	648,000
Potion	600,000	6/15	432,000
Total	1,500,000		1,080,000

The total joint production costs of P1,152,000 was reduced by the net realizable value of by-product of P72,000 (P126,000 - 54,000), thus the remaining amount was allocated to main products using the net realizable value of allocating the joint costs, which based on the foregoing information is equal to the its market values due to the absence of related further processing costs.

PROB. 9-14 *Suggested answer* (a) P5.72

Product		Sales value		Joint costs
JKA	(4,000 x 11)	44,000	44/100	22,880
JKB	(3,000 x 10)	30,000	30/100	15,600
JKC	(1,000 x 26)	26,000	26/100	13,520
Total		100,000		52,000

Cost per kilo of JKA (P22,880/ 4,000 kilos)	5.72

Under the relative sales value approach, the joint production cost of P52,000 (P24,000 + 28,000) is allocated based on the relative market values of the products. One of the accepted methods for costing by-products is to show the revenue from the sales of by-product as additional sales revenue. In this regard, joint production cost is not allocated to the by-product.

PROB. 9-15

a. *Suggested answer* (b) P30,000

	NRV		Allocated cost
Alfa (4 - 2) x 10,000	20,000	2/6	30,000
Betters (10 - 2) x 5,000	40,000	4/6	60,000
Total	60,000		90,000

Under the net realizable value method of allocating the joint costs, allocation must be based on the difference between the sale value and the actual cost to complete and sell (further processing cost). When Atlas inventories the by-product, the by-product is recognized when produced and treated as a reduction of joint costs, thus the allocable joint cost is P90,000 (P93,000 - 3,000).

b. *Suggested answer* (d) P60,000

	Qty. (lbs.)		Allocated cost
Alfa	10,000	10/15	60,000
Betters	5,000	5/15	30,000
Total	15,000		90,000

The quantitative unit method attempts to distribute the total joint production costs on the basis of some common unit of measurement, such as pounds, gallons, tons, or board feet. If the joint products are not measurable by the basic measurement unit, the joint units must be converted to a denominator common to all units produced. Again, since the by-product was inventoried, the allocable joint production cost was P90,000 (P93,000 - 3,000).

c. *Suggested answer* (d) P50,400

	Caloric value		Allocated cost
Alfa (10,000 x 4,400)	44,000,000	44%	39,600
Betters (5,000 x 11,200)	56,000,000	56%	50,400
Total	100,000,000		90,000

Given that allocation should be based on the weighted quantity (caloric value per pound) method, the fraction to be used for purposes of allocation must be based on the total caloric value of the products. And since the by-product was inventoried, the allocable joint cost was reduced by the net realizable value of the by-product to P90,000.

d. *Suggested answer* (b) P40,000

	Gross market value		Allocated cost
Alfa (10,000 x 4)	40,000	40/90	40,000
Better (5,000 x 10)	50,000	50/90	50,000
	90,000		90,000

The gross market value method is synonymous with the relative sales market value method of allocating the joint production cost. Again, the by-product was inventoried, thus the allocable joint cost was reduced by the realizable value of the by-product.

e. *Suggested answer* (d) P62,000

	Net realizable value		Allocated cost
Alfa (4 - 2) x 10,000	20,000	2/6	31,000
Betters (10 - 2) x 5,000	40,000	4/6	62,000
Total	60,000		93,000

When by-product are not inventoried, allocation of joint cost is based on the net realizable value of main products and the realizable value of the by-product is deducted from the cost of goods sold of main products sold. Thus, the joint cost is not adjusted for the value of the by-product.

PROB. 9-16

a. *Suggested answer (a) Unaffected*

Before the change, the net amount increases the gross margin because it is deducted from cost of goods sold. After the change, the net amount increases the gross margin because it is added to sales. Therefore, the effect is the same.

b. *Suggested answer (c) Decrease by P3,000*

Before the change, the net amount increases the gross margin because it is deducted from cost of goods sold. After the change, the net amount decreases the gross margin because it is recorded as other income, which will not affect the cost of goods sold. Therefore, the net decrease in the gross margin is P3,000 (4-1 x 1,000).

c. *Suggested answer (c) 3,000*

The net realizable value is equal to estimated selling price less estimated cost to complete and to sell. Thus, given no additional processing cost, the net realizable value is equal to selling price less cost to sell in the amount of P3.00 (4.00 – 1.00).

PROB. 9-17

a) *Suggested answer* (d) P167,500

Production department	Budgeted hours of services		(Quality Control) Allocated cost
Machining	21,000	21/28	262,500
Assembly	7,000	7/28	87,500
	28,000		350,000

Production department	Budgeted hours of services		(Maintenance) Allocated cost
Machining	18,000	18/30	120,000
Assembly	12,000	12/30	80,000
	30,000		200,000
Allocated cost to Assembly:			
Quality control			87,500
Maintenance			80,000
Total			167,500

Under the direct method of allocating service department costs, the service department costs are allocated only to producing departments. This approach minimizes clerical works, but fails to measure the total costs of individual service departments when such information is needed for costing planning and control.

The direct method can be justified for product costing if the final costs of a producing department differ only immaterially, depending on whether the costs of a service department are prorated to other service department or not. Thus, the total service cost allocated to the Assembly department was P167,500, as shown above. Incidentally, the total allocated service cost to the Machining department was P382,500 (P262,500 + 120,000).

b) *Suggested answer* (b) P108,000

Departments	Quality control hours of services		(Quality Control) Allocated cost
Maintenance	7,000	7/35	70,000
Machining	21,000	21/35	210,000
Assembly	7,000	7/35	70,000
	35,000		350,000

Departments	Maintenance hours of services		(Maintenance) Allocated cost
Machining	18,000	18/30	162,000
Assembly	12,000	12/30	108,000
	30,000		270,000

The step-down method transfers the cost of service departments by a sequence of steps; that is in the prescribed order by department. The step method is also called the sequential method because are allocated from service departments in a predetermined sequence. Once cost is allocated from a service department, no other service department's cost is allocated back to it in a subsequent step.

Given that the allocation will begin with the quality control department, the first step is to allocate the cost of quality control department of P350,000 to Maintenance, Machining, and Assembly departments; and then the total cost of maintenance department (its own service cost plus cost of quality control cost allocated to maintenance) in the total amount of P270,000 (P200,000 + 70,000) will be allocated to the remaining departments (Machining and Assembly departments). Thus, the allocated cost to Assembly department was P108,000. Incidentally, the allocated cost to Machining department should be P162,000, as shown above.

c) *Suggested answer (d) 421,053*

$$Q = 350,000 + (10,000/40,000 \text{ hrs})M$$
$$= 350,000 = .25M$$

$$M = 200,000 + (7,000/35,000 \text{ hrs})Q$$
$$= 200,000 + .2Q$$

$$Q = 350,000 + .25(200,000 + .2Q)$$
$$= 350,000 + 50,000 + .05Q$$
$$.95Q = 400,000$$
$$421,053$$

The reciprocal method permits mutual allocations of service costs among service departments; thus a system of simultaneous equation, as shown above.

PROB. 9-18 (Adapted)

a. *Suggested answer (a) Zero*

The direct method allocates service department costs directly to the producing departments without recognition of services provided among the service departments. Hence, no service cost is allocated to the Tool Department because it is a service department.

b. *Suggested answer (b) P 875*

Repair Dept.'s Overhead allocated to Tool Dept. (1/40 x 35,000)	875

Under the step-down method, service costs are allocated to all departments. However, no reciprocal allocations are allowed. The process may begin with the department, that incurs the greatest costs, or that provides the greatest percentage of its services to other service departments. In this case, the Repair Department is the logical starting point. Given that service costs are allocated to each department (service or production) on the basis of its proportion of employees (excluding employees in the allocating department), the total number of employees should be 40 employees (from Repair Department to Bolting Department).

PROB. 9-19 *Suggested answer (d) 23,061*

$$
\begin{aligned}
S1 &= 27{,}000 + .2S2 \\
&\quad 27{,}000 + [.2(18{,}000 + .1S1)] \\
&\quad 27{,}000 + 3.600 + .02S1 \\
.98S1 &= 30{,}600 \\
S1 &= 31{,}224
\end{aligned}
$$

S2 = 18,000 = .1(31,224)
18,000 + 3,122
S2 = 21,122

Service cost allocated to P2:	
S1 (40% x 31,224)	12,490
S2 (50% x 21,122)	10,561
Total service costs allocated to P2	23,051

The reciprocal method allocates service department costs to other service departments as well as to production departments by means of simultaneous equations, as shown above.

Chapter 10

STANDARD COSTING

Introduction

A standard cost is the predetermined cost of manufacturing a single unit or a specific quantity of product during a specific period. It is the planned cost of a product under current and/or anticipated operating conditions. A standard cost has two components: a physical standard (a standard quantity of inputs per unit of output) and a price standard (a standard cost or rate per unit of input). A standard is a norm. Whatever is considered normal can generally be accepted as standard. And the difference between actual costs and budgeted cost, or the difference between actual costs and standard cost is called *variance*.

DETERMINING STANDARD COST VARIANCES

Standard cost variances may result for each item of direct materials, for each labor operations, and for factory overhead attributed to each department where actual costs are measured against standard costs. If the actual cost exceeds the standard cost, the variance is referred to as *unfavorable,* because the effect has an unfavorable effect on income. Conversely, if the standard cost exceeds the actual cost, the variance is referred to as *favorable,* because it has a favorable effect on income.

DIRECT MATERIALS STANDARDS AND VARIANCES

In the determination of standards for direct materials, two major factors must be considered: 1.) the quantity (usage) standard, and 2.) the price standard. If the actual quantity of direct materials used in the production of goods differs from the standard quantity, there is *quantity variance.* If the actual unit price of the direct materials differs from the standard price, there is *price variance.*

Direct Materials Quantity (Usage) Variance

The *direct materials quantity variance* is the difference between the actual quantity used and the standard quantity allowed, multiplied by the standard price per unit. The standard quantity allowed is determined by multiplying the quantity of materials that should be required to produce one unit of product (the standard quantity allowed per unit) by the actual number of units produced during the period. If the standard quantity exceeds the actual quantity used, the variance is *favorable*; however, if the actual quantity of materials used exceeds the standard quantity, the variance is *unfavorable*.

A favorable materials quantity variance indicates that the workers either have been unusually efficient or are producing lower quality products with less than the standard quantity of materials. Hence, a favorable variance is not always positive. A favorable variance may be as bad as or worse than a unfavorable variance. It may suggest that costs have been reduced at the expense of product quality.

An unfavorable materials quantity variance is usually caused by waste, shrinkage, or theft. As a result, an unfavorable quantity variance may be the responsibility of the supervisor of the production department because the excess usage occurred while the materials were under that person's supervision.

Direct Materials Price Variance

Materials price variances can be recorded at the time materials are purchased (referred to as a *materials purchase price variance)* or at the time materials are issued to the factory (referred to as a *materials price usage variance).*The *direct materials purchase price variance* is the difference between the actual price per unit and the standard price per unit, multiplied by the *actual quantity purchased*. While the *direct materials price usage variance* is the difference between the actual price per unit and the standard price per unit, multiplied by the *actual quantity used*. If the standard price per unit exceeds the actual price per unit, the variance is *favorable;* however, if the actual price per unit exceeds the standard price per unit, the variance is *unfavorable*.

DIRECT LABOR STANDARDS AND VARIANCES

In the determination of standards of direct labor, two major factors must be considered, namely: 1.) the time (usage or efficiency) standard, and 2.) the rate (price or wage) standard. If the actual direct labor hours spent in production differ from the standard hours, there is an *efficiency variance.* If the wage rate paid (actual) differ from the standard rate, there is a *rate variance.*

Direct Labor Efficiency (Time) Variance

The direct labor efficiency variance is the difference between the actual hours worked and the standard hours, multiplied by the standard rate per hour. If the actual hours worked exceed the standard hours, the variance is *unfavorable;* however, if the standard hours exceed the actual hours worked, the variance is *favorable.*

A favorable direct labor efficiency variance would suggest that the workers in the department were extremely efficient during the period and probably should be commended for their efforts. However, this may also indicate that the workers did not give enough attention to some products and quality may have deteriorated. The reasons should be determined.

Sometimes, an unfavorable direct labor efficiency variance may be caused by worker's taking unauthorized breaks. It may also be caused by production delays resulting from materials shortages or inferior materials.

Direct Labor Rate Variance

The direct labor rate variance is the difference between the actual rate per hour and the standard rate per hour, multiplied by the actual hours worked. If the standard rate per hour exceeds the actual rate per hour, the variance is *favorable;* however, if the actual rate per hour exceeds the standard rate per hour, the variance is *unfavorable.*

Most of the time, an unfavorable direct labor rate variance is the result of a renegotiated labor contract. Hence, it is outside the control of management, and the cost standards should be revised. This may also indicate that a supervisor is using the wrong workers for a particular job. The supervisor should always examine an unfavorable rate variance to be certain that workers are being allocated most efficiently.

FACTORY OVERHEAD STANDARDS AND VARIANCES

Because of the variation of costs and their nature as indirect costs, the procedures used in determining standards and variances for factory overhead cost are more complex than those used for prime costs. In order to aid the determination of subsequent variations from standard, a flexible budget may be used to establish the standard factory overhead rate. The standard rate is determine by dividing the standard factory overhead costs by the standard amount of an activity, such as machine hours, direct labor hours, or direct labor cost.

TWO VARIANCE METHOD

The two variance method is the most frequently used method in actual practice, perhaps because it is the easiest to compute. The two variances are the controllable variance and the volume variance.

Controllable Variance

The controllable variance (sometimes called the budget variance or the flexible budget variance) is the difference between the *actual overhead* incurred and *budgeted overhead based on standard number of hours (units)* allowed for actual production. The budget allowance may be thought of as the amount of factory overhead that would have been budgeted at standard if the actual quantity produced have been known in advance, e.g., *total budgeted variable overhead at standard for actual production plus total budgeted fixed factory overhead.*

The controllable variance in two-way analysis is a combination of two variable cost variances and one fixed cost variance. It is the difference between the overhead that is budgeted at the actual level of production and the actual cost incurred. Thus, it is the difference between the actual overhead incurred and the sum of the budgeted fixed overhead and the variable overhead applied based on the standard rate and standard input allowed for the actual input.

Volume (Idle Capacity) Variance

The volume variance is the difference between the *budgeted allowance based on the standard hours (units)* of the allocation base allowed for actual production and the *standard factory overhead* chargeable to production.

The volume variance is a fixed overhead variance. An unfavorable volume variance is often the result of labor strikes, major machine breakdowns, or lack of sales orders. It is the least important variance for cost control because it does not measure a difference between actual and budgeted prices or actual and budgeted inputs.

RECORDING OF VARIANCES

Usually, variances do not appear on the financial statements of a company. They are used for managerial control and are recorded in the ledger accounts. When standard costs are recorded in inventory account, direct labor and materials variances are also recorded.

Specifically, direct labor is recorded as a liability at actual cost, but it is ordinarily charged to work in process control at its standard cost for the standard quantity used. Accordingly, the direct labor rate and efficiency variances are recognized. Direct material, on the other hand, is debited to materials control at standard prices at the time of purchases. The purpose of which is to isolate the direct materials price variance. When the direct materials are used, they are debited to work in process at the standard cost for the standard quantity, and the materials quantity variance is recognized. Actual overhead costs are debited to overhead control and credited to accounts payable, wages payable, etc. Applied overhead is credited to overhead control account, or to an overhead applied account and debited to work in process control. The simplest method of recording the overhead variance is to wait until year-end. The variances can then be recognized separately when the overhead control and overhead applied accounts are closed. The balancing debits or credits are the variance accounts.

As discussed in the preceding chapter, variance of insignificant amounts are closed to cost of goods sold, and significant variances are prorated to cost of goods sold, work in process, and finished goods.

MULTIPLE CHOICE – Theory of Accounts

TOA 10-1 (AICPA)

A standard cost system may be used in
a. Job order costing but not process costing.
b. Either job order costing or process costing.
c. Process costing but not job order costing.
d. Neither process costing nor job order costing.

TOA 10-2 (AICPA)

Which of the following is a purpose of standard costing?
a. Determine breakeven production level.
b. Control costs.
c. Eliminate the need for subjective decisions by management.
d. Allocate cost with more accuracy.

TOA 10-3 (AICPA)

Which of the following is true concerning standard costs?
a. Standard costs are estimates of costs attainable only under the most ideal conditions, but rarely practicable.
b. Standard costs are difficult to use with a process costing system.
c. If properly used, standard can help motivate employees.
d. Unfavorable variances, material in amount, should be investigated, but large favorable variances need not be investigated.

TOA 10-4 (Adapted)

Which one of the following is least likely to be involved in establishing standard costs for evaluation purposes?
a. Budgetary accountants
b. Industrial engineers
c. Top management
d. Quality control personnel

The volume variance is the difference between the *budgeted allowance based on the standard hours (units)* of the allocation base allowed for actual production and the *standard factory overhead* chargeable to production.

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c. Top management
d. Quality control personnel

TOA 10-5 (Adapted)

A difference between standard costs used for cost control and budgeted costs

a. Can exist because standard costs must be determined after the budget us completed.
b. Can exist because standard costs represent what costs should be, whereas budgeted costs represent expected actual costs.
c. Can exist because budgeted costs are historical, whereas standard costs are based on engineering studies.
d. Cannot exist because they should be the same amounts.

TOA 10-6 (Adapted)

A standard costing system is most often used by a firm in conjunction with

a. Management by objectives.
b. Target (hurdle) rates of return.
c. Participative management programs.
d. Flexible budgets

TOA 10-7 (Adapted)

The best basis upon which cost standards should be set to measure controllable production inefficiencies is

a. Engineering standards based on ideal performance.
b. Normal capacity.
c. Recent average historical performance.
d. Engineering standards based on attainable performance.

TOA 10-8 (AICPA)

When standard costs are used in a process costing system, how, if at all, are equivalent units of production (EUP) involved or used in the cost report at standard?

a. Equivalent units are not used.
b. Equivalent units are computed using a special approach.
c. The actual equivalent units are multiplied by the standard cost per unit.
d. The standard equivalent units are multiplied by the actual cost per unit.

TOA 10-9 (AICPA)

Standard costing will produce the same income before extraordinary items as actual costing when standard cost variances are assigned to

a. Work in process and finished goods inventories.
b. An income or expense account.
c. Cost of goods sold and inventories.
d. Cost of goods sold.

TOA 10-10 (AICPA)

Differences in product costs resulting from the application of actual overhead rates rather than predetermined overhead rates could be immaterial if

a. Production is not stable.
b. Fixed factory overhead is a significant cost.
c. Several products are produced simultaneously.
d. Overhead is composed only of variable costs.

TOA 10-11 (Adapted)

Under Standard Costing System, when cost of direct material or cost of direct labor will be journalized, the work in process account will be debited at

a. Actual cost
b. Standard cost
c. Future cost
d. Historical cost

TOA 10-12 (Adapted)

The difference between the actual amounts and the flexible budget amounts for the actual output achieved is the

a. Production volume variance.
b. Flexible budget variance.
c. Sales volume variance.
d. Standard cost variance.

TOA 10-13 (Adapted)

The sales volume variance equals

a. A flexible budget amount minus a static budget amount.
b. Actual operating income minus flexible budget operating income.
c. Actual unit price minus budgeted unit price, times the actual units produced.
d. Budgeted unit price times the difference between actual inputs and budgeted inputs for the actual activity level achieved.

TOA 10-14 (Adapted)

An efficiency variance equals

a. A flexible budget amount minus a static budget amount.
b. Actual operating income minus flexible budget operating income.
c. Actual unit price minus budgeted unit price, times the actual units produced.
d. Budgeted unit price times the difference between actual inputs and budgeted inputs for the actual activity level achieved.

TOA 10-15 (AICPA)

Which department is customarily held responsible for an unfavorable materials usage variance?

a. Quality control.
b. Purchasing.
c. Engineering.
d. Production.

TOA 10-16 (Adapted)

Under a standard cost system, the materials efficiency variances are the responsibility of

a. Production and industrial engineering.
b. Purchasing and industrial engineering.

c. Purchasing and sales.
d. Sales and industrial engineering.

TOA 10-17 (Adapted)

Which of the following variances is most controllable by the production control supervisor?

a. Material price variance
b. Material usage variance
c. Variable overhead spending variance
d. Fixed overhead budget variance

TOA 10-18

Under Standard Costing System, if the journal entry to record usage of direct materials include a credit to direct material usage variance, it means that

a. Actual price of direct material is higher than the standard price
b. Actual price of direct material is lower than the standard price
c. Actual direct materials used in higher than the standard quantity of direct materials
d. Actual direct materials used is lower than the standard quantity of direct materials.

TOA 10-19 (AICPA)

An unfavorable price variance occurs because of

a. Price increases for raw materials.
b. Price decreases for raw materials.
c. Less than anticipated levels of waste in the manufacturing process.
d. More than anticipated levels of waste in the manufacturing process.

TOA 10-20 (Adapted)

The difference between the actual and standard price of an input, multiplied by the actual quantity equals the

a. Price (rate) variance

b. Controllable variance
c. Spending variance
d. Quantity (usage) variance

TOA 10-21 (Adapted)

Under Standard Costing System, direct material price variance shall be appropriately computed using

a. Actual direct materials used
b. Actual direct materials purchased
c. Actual direct materials wasted
d. Actual direct materials converted to work in process

TOA 10-22 (AICPA)

If the total materials variance (actual cost of materials used compared with the standard cost of the standard amount of materials required) for a given operation is favorable, why must this variance be further evaluated as to price and usage?

a. There is no need to further evaluate the total materials variance if it is favorable.
b. Generally accepted accounting principles require that all variances be analyzed in three stages.
c. All variances must appear in the annual report to equity owners for proper disclosure.
d. Determining price and usage variances allows management to evaluate the efficiency of the purchasing and production functions.

TOA 10-23 (Adapted)

Price variances and efficiency variances can be key to the performance measurement within a company. In evaluating the performance within a company, a materials efficiency variance can be caused by all of the following except the

a. Performance of the workers using the material.
b. Actions of the purchasing department.
c. Design of the product.
d. Sales volume of the product.

TOA 10-24 (Adapted)

The journal entry to record the usage and purchase of direct materials during the year includes a debit to direct material efficiency variance. Which of the following statements is correct?

a. The actual direct material used in production is higher than the standard direct materials that should have been used.
b. The actual direct materials used in production is lower than the standard direct materials that should have been used.
c. The actual purchase price of direct materials is higher than the standard price of direct materials.
d. The actual purchase price of direct materials is lower than the standard price of direct materials.

TOA 10-25 (AICPA)

A debit balance in the direct labor efficiency variance account indicates that

a. Standard hours exceed actual hours.
b. Actual hours exceed standard hours.
c. Standard rate and standard hours exceed actual rate and actual hours.
d. Actual rate and actual hours exceed standard rate and standard hours.

TOA 10-26 (AICPA)

Which of the following unfavorable variances is directly affected by the relative position of a production process on a learning curve?

a. Materials mix.
b. Materials price.
c. Labor rate.
d. Labor efficiency.

TOA 10-27 (Adapted)

Variable overhead is applied on the basis of standard direct labor hours. If, for a given period, the direct labor efficiency variance is unfavorable, the variable overhead efficiency variance will be

a. Favorable
b. Unfavorable
c. Zero
d. The same amount as the labor efficiency variance

TOA 10-28 (Adapted)

Under Standard Costing System, if the actual direct labor hours is more than the standard direct labor hours, the journal entry to record the incurring of direct labor cost will result to

a. Debit to labor efficiency variance
b. Credit to labor rate variance
c. Credit to labor efficiency variance
d. Debit to labor rate variance

TOA 10-29 (AICPA)

Excess direct labor wages resulting from overtime premium will be disclosed in which type of variance?

a. Yield
b. Quantity
c. Labor efficiency
d. Labor rate

TOA 10-30 (AICPA)

The difference between the actual labor rate multiplied by the actual hours worked and the standard labor rate multiplied by the standard labor hours is the

a. Total labor variance.
b. Labor rate variance.
c. Labor usage variance.
d. Labor efficiency variance.

TOA 10-31 (Adapted)

Which of the following factory overhead variances is pure variable?

a. Spending variance
b. Controllable variance
c. Efficiency variance
d. Volume variance

TOA 10-32 (AICPA)

The fixed factory overhead application rate is a function of a predetermined activity level. If standard hours allowed for good output equal this predetermined activity level for a given period, the volume variance will be

a. Zero.
b. Favorable.
c. Unfavorable.
d. Either favorable or unfavorable, depending on the budgeted overhead.

TOA 10-33 (AICPA)

Which of the following standard costing variances would be least controllable by a production supervisor?

a. Overhead volume.
b. Overhead efficiency.
c. Labor efficiency.
d. Materials usage.

TOA 10-34 (Adapted)

Which of the following factory overhead variances is pure fixed?

a. Spending variance
b. Controllable variance
c. Efficiency variance
d. Volume variance

TOA 10-35 (AICPA)

Under the two-variance method for analyzing factory overhead, the difference between the actual factory overhead and the factory overhead applied to production is the

a. Controllable variance.
b. Net overhead variance.
c. Efficiency variance.
d. Volume variance.

MULTIPLE CHOICE – Problems

PROB. 10-1 (Adapted)

A project required 50 hours to complete at a cost of P10 per hour but should have taken only 45 hours at a cost of P12 per hour. What is the proper journal entry to record the costs?

a.	Work in process	540	
	DL efficiency variance	60	
	DL Price variance		100
	Accrued payroll		500
b.	Wage expenses	440	
	DL efficiency variance	60	
	Accrued payroll		500
c.	Work in process	460	
	DL price variance	100	
	DL efficiency variance		60
	Accrued payroll		500
d.	Work in process	500	
	Accrued payroll		500

PROB. 10-2 (Adapted)

A company would have applied P31,500 of fixed factory overhead if capacity usage equaled the master budget. Given that 2,000 standard hours were allowed for the actual output, that actual fixed factory overhead equaled the budgeted amount, and that overhead was applied at a rate of P15 per hour, what is the journal entry to close the fixed factory overhead accounts?

a.	Fixed overhead control	30,000	
	Production volume variance	1,500	
	Fixed overhead applied		31,500
b.	Cost of goods sold	31,500	
	Fixed overhead control		31,500
c.	Work in process	30,000	
	Overhead price variance	1,500	
	Fixed overhead applied		31,500
d.	Fixed overhead applied	30,000	
	Production volume variance	1,500	
	Fixed overhead control		31,500

PROB. 10-3 (Adapted)

X Company paid its janitors P5 per hour to clean the production area. The company set standard cost of janitorial work at P4.50 per hour. For the month of May, 530 hours were worked by the janitors.

a) What is the proper journal entry to record this janitorial expenses worked by the janitors?

a.	Salaries expense	2,650	
	Payroll		2,650
b.	Variable overhead control	2,650	
	Variable overhead applied		2,650
c.	Variable overhead control	2,650	
	Payroll payable		2,650
d.	Variable overhead applied	2,650	
	Payroll payable		2,650

b) What is the appropriate journal entry to record the application of the 530 hours worked by the janitors?

a.	Work in process	2,385	
	Variable overhead applied		2,385
b.	Work in process	2,385	
	Variable overhead control		2,385
c.	Variable overhead control	265	
	Work in process	2,385	
	Variable overhead applied		2,650
d.	Cost of goods sold	2,385	
	Variable overhead applied		2,385

PROB. 10-4 (Adapted)

Process Co. uses a standard cost system that carries materials at actual price until they are transferred to the work in process account. In Project A, 500 units of Material X were used at a cost of P10 per unit. Standards require 450 units to complete this project. The standard price is established at P9 per unit. What is the journal entry to record direct materials issued?

a.	Work in process	4,950	
	DM price variance	500	
	DM quantity variance		450

	Inventory		5,000
b.	Work in process	5,950	
	DM price variance		500
	DM quantity variance		450
	Inventory		5,000
c.	Work in process	4,050	
	DM price variance	500	
	DM quantity variance	450	
	Inventory		5,000
d.	Work in process	5,000	
	Inventory		5,000

PROB. 10-5 (AICPA)

Information on Cox Co.'s direct material costs for the month of January was as follows:

Actual quantity purchased	18,000
Actual unit purchase price	P 3.60
Materials purchase price variance - unfavorable (based on purchases)	P 3,600
Standard quantity allowed for actual production	16,000
Actual quantity used	15,000

For the month of January, there was a favorable direct material usage variance of

a. 3,360
b. 3,375
c. 3,400
d. 3,800

PROB. 10-6 (AICPA)

Carr Co. had an unfavorable materials usage variance of P900. What amount of this variance should be charged to each department?

	Purchasing	Warehousing	Manufacturing
a.	0	0	900
b.	0	900	0
c.	300	300	300
d.	900	0	0

PROB. 10 - 7 (Adapted)

Assume price variances are recorded at the time of purchase. What is the journal entry to record a direct materials price variance if materials are purchased at P5 per unit for P650 and their standard price is P4 per unit?

a.	Inventory	650	
	Accounts payable		650
b.	Inventory	520	
	DM price variance	130	
	Accounts payable		650
c.	Inventory	520	
	Work in process	130	
	Cash		650
d.	Finished goods	520	
	DM price variance	130	
	Cash		650

PROB. 10-8 (AICPA)

The standard direct material cost to produce a unit of Lem is 4 meters of material at P2.50 per meter. During May, 4,200 meters of material costing P10,080 were purchased and used to produce 1,000 units of Lem. What was the material price variance for the month of May?

a. 400 favorable
b. 420 favorable
c. 80 unfavorable
d. 480 unfavorable

PROB. 10-9 (AICPA)

Perkins Co., which has a standard cost system, had 500 units of raw materials X in its inventory at June 1, purchased in May for P1.20 per unit and carried at a standard cost of P1.00. The following information pertains to raw material X for the month of June:

Actual number of units purchased	1,400
Actual number of units used	1,500

Standard number of units allowed for actual production	1,300
Standard cost per unit	P 1.00
Actual cost per unit	1.10

The unfavorable materials purchase price variance for raw material X for June was

a. 0
b. 130
c. 140
d. 150

PROB. 10-10 (AICPA)

Dahl Co. uses a standard costing system in connection with the manufacture of a "one size fits all" article of clothing. Each unit of finished product contains 2 yards of direct materials. However, a 20% of direct materials spoilage calculated on input quantities occurs during the manufacturing process. The cost of the direct materials is P3 per yard. The standard direct material cost per unit of finished product is

a. 4.80
b. 6.00
c. 7.20
d. 7.50

PROB. 10-11 (AICPA)

Blaster, Inc. a manufacturer of portable radios, purchases the components from subcontractors to use to assemble into a complete radio. Each radio requires three units each of Part XBEZ52 which has a standard cost of P1.45 per unit. During May, Blaster experienced the following with respect to Part XBEZ52.

	Units
Purchases (P18,000)	12,000
Consumed in manufacturing	10,000
Radios manufactured	3,000

a. During May, Blaster, Inc. incurred a direct materials purchase price variance of

a. 450 unfavorable.

b. 450 favorable.
c. 500 favorable.
d. 600 unfavorable.

b. During May, Blaster, Inc. incurred a materials efficiency variance of
a. 1,450 unfavorable.
b. 1,450 favorable.
c. 4,350 unfavorable.
d. 4,350 favorable.

PROB. 10-12 (AICPA)

ChemKing uses a standard costing system in the manufacture of its single product. The 35,000 units of raw materials in inventory were purchased for P105,000, and two units of raw materials are required to produce one unit of final product. In November, the company produced 12,000 units of product. The standard allowed for materials was P60,000, and there was an unfavorable quantity variance of P2,500.

a. ChemKing's standard price for one unit of material is
a. 2.00
b. 2.50
c. 3.00
d. 5.00

b. The units of materials used to produce November output totaled
a. 12,500 units
b. 23,000 units
c. 24,000 units
d. 25,000 units

c. The materials price variance for the units used in November was
a. 2,500 unfavorable.
b. 11,000 unfavorable.
c. 12,500 unfavorable.
d. 3,500 unfavorable.

PROB. 10-13 (Author)

An entity recently set-up its standard costs for its direct materials. The entity sets the benchmark at 3 units of direct materials per product at a standard price of P5 per unit of direct material.
During the year, the entity acquired 400 units of direct materials at a total cost of P2,400. The entity also manufactured 100 products using 250 units of direct materials.

a. What is the direct material price variance?
   a. 250 unfavorable
   b. 300 favorable
   c. 350 favorable
   d. 400 unfavorable

b. What is the direct material usage variance?
   a. 150 unfavorable
   b. 300 unfavorable
   c. 250 favorable
   d. 350 favorable

PROB. 10-14 (AICPA)

Yola Co. manufactures one product with a standard direct manufacturing labor cost of 4 hours at P24.00 per hour. During June, 1,000 units were produced using 4,100 hours at P24.40 per hour. The unfavorable direct labor efficiency variance was
   a. 2,440
   b. 2,400
   c. 1,640
   d. 800

PROB. 10-15 (AICPA)

Harper Co. uses a standard cost system. Data relating to direct labor for the month of August is as follows:

Direct labor efficiency variance – favorable	P 5,250
Standard direct labor rate	7.00

Actual direct labor rate	7.50
Standard hours allowed for actual production	9,000

What are the actual hours worked for the month of August?

a. 9,750
b. 8,400
c. 8,300
d. 8,250

PROB. 10-16 (AICPA)

The flexible budget for the month of May was for 9,000 units with direct materials at P15 per unit. Direct labor was budgeted at 45 minutes per unit for a total of P81,000. Actual output for the month was 8,500 units with P127,500 in direct materials and P77,775 in direct labor expense. The direct labor standard of 45 minutes was maintained throughout the month. Variance analysis of the performance for the month of May would show a (an)

a. 7,500 favorable materials usage variance.
b. 1,275 favorable direct labor efficiency variance.
c. 7,500 unfavorable material usage variance.
d. 1,275 unfavorable direct labor price variance.

PROB. 10-17 (RPCPA)

Information on San Edilberto Co.'s direct labor costs for the month of August is as follows:

Actual rate	P 7.50
Standard hours	11,000
Actual hours	10,000
Direct labor price variance - unfavorable	P 5,000

What was the standard rate for August?

a. 8.00
b. 6.95
c. 8.05

d. 7.00

PROB. 10-18 (AICPA)

The following direct manufacturing labor information pertains to the manufacture of product Glu:

Time required to make one unit	2 DHL
Number of direct workers	50
Number of productive hours per week, per worker	40
Weekly wages per worker	P500
Worker's benefits treated as direct manufacturing labor costs	20% of wages

What is the standard direct manufacturing labor cost per unit of product Glu?

a. 30
b. 24
c. 15
d. 12

PROB. 10-19 (AICPA)

The following information pertains to Bates Co.'s direct labor for March:

Standard direct labor hours	21,000
Actual direct labor hours	20,000
Favorable direct labor rate variance	P8,400
Standard direct labor rate per hour	6.30

What was Bate's total actual direct labor cost for March?

a. 117,600
b. 118,000
c. 134,000
d. 134,400

PROB. 10-20

An entity recently set-up its standard costs for its direct labor. The entity sets the benchmark at 2 direct labor hours per product at a standard rate of P100 per direct labor hour. During the year, the entity manufactured 10 products using 30 direct labor hours at total direct labor costs of P2,400.

a. What is the direct labor rate variance?
   a. 600 favorable
   b. 400 unfavorable
   c. 200 favorable
   d. 800 unfavorable

b. What is the direct labor efficiency variance?
   a. 400 favorable
   b. 1,000 unfavorable
   c. 600 unfavorable
   d. 200 favorable

PROB. 10-21 (AICPA)

The following information pertains to Roe Co.'s manufacturing operations:

Standard direct manufacturing labor hours per unit	2
Actual direct manufacturing labor hours	10,500
Number of units produced	5,000
Standard variable overhead per standard direct manufacturing labor hour	P 3.00
Actual variable overhead	P 82,000

Roe's unfavorable variable overhead efficiency variance was
a. 0
b. 1,500
c. 2,000
d. 3,500

PROB. 10-22 (AICPA)

John Player Corp. employs a standard absorption system for product costing. The standard cost of its product is as follows:

Direct materials	P 14.50
Direct labor (2 direct labor hours @ P8)	16.00
Manufacturing overhead (2 direct labor hours @ P11)	22.00
Total standard cost	P 52.50

The manufacturing overhead rate is based upon normal activity level of 600,000 direct labor hours. JP planned to produce 25,000 units each month during the year. The budgeted annual manufacturing overhead is:

Variable	P 3,600,000
Fixed	3,000,000
Total	P 6,600,000

During October, JP produced 26,000 units. JP used 53,500 direct labor hours in October at a cost of P433,350. Actual manufacturing overhead for the month was P250,000 fixed and P325,000 variable. What is the manufacturing overhead volume variance for October?

a. 10,000 unfavorable
b. 3,000 unfavorable
c. 9,000 unfavorable
d. 10,000 favorable

PROB. 10-23 (AICPA)

Jordan Co. manufactures product X with the following standard costs of direct materials and direct labor:

Direct materials, 20 yards @ P13.50 per yard	P 270.00
Direct labor, 4 hours @ P90.00 per hour	360.00

The following information pertains to the month of May:

Direct materials purchased, 18,000 yards @ P13.80 per yard	P 248,400
Direct labor, 2,100 hours @ P91.50 per hour	192,150

Direct materials used, 9,500 yards
Production during May 500 units

a. What is the direct material price variance (based on purchases)?
   a. 5,400 favorable
   b. 5,400 unfavorable
   c. 6,750 favorable
   d. 6,750 unfavorable

b. What is the material usage variance?
   a. 5,400 favorable
   b. 5,400 unfavorable
   c. 6,750 favorable
   d. 6,750 unfavorable

c. What is the direct labor rate variance?
   a. 3,150 favorable
   b. 9,000 favorable
   c. 3,150 unfavorable
   d. 9,000 unfavorable

d. What is the direct labor efficiency variance?
   a. 3,150 favorable
   b. 9,000 favorable
   c. 3,150 unfavorable
   d. 9,000 unfavorable

PROB. 10-24 (AICPA)

A manufacturing firm planned to manufacture and sell 100,000 units of product during the year at a variable cost per unit of P4.00 and a fixed cost per unit of P2.00. The firm fell short of its goal and only manufactured 80,000 units at a total incurred cost of P515,000. The firm's manufacturing cost variance was

a. 85,000 favorable.
b. 35,000 unfavorable.
c. 5,000 favorable.
d. 5,000 unfavorable.

PROB. 10-25 (RPCPA)

The U.R. Good Co. produces a product using standard costs as follows:

1. Standard cost per unit

Materials	7 kilos at P3.50 per kilo
Labor	8 hours at P1.75 per kilo
Overhead: Fixed	P1.15 per hour or P9.20 per unit
Variable	P0.85 per hour or P6.80 per unit

2. Overhead applied on direct labor hours
3. Actual performance (1 month)

a. volume produced	800
b. labor hours	6,300
c. overhead	P13,200
d. Material cost	P3.45 per kilo
e. Labor cost	P1.80 per kilo
f. materials used	4,800 kilos

From the given information, determine the following:

a. Material price variance is
   a. 240.00 favorable
   b. 2,800.00 unfavorable
   c. 240,00 unfavorable
   d. 360.00 favorable

b. Labor rate variance is
   a. 400.00 favorable
   b. 315.00 unfavorable
   c. 175.00 favorable
   d. 500.00 unfavorable

c. Total material variance is
   a. 2,800.00 favorable
   b. 2,800.00 unfavorable
   c. 3,000.00 unfavorable
   d. 3,040.00 favorable

d. Material quantity variance is
   a. 200.00 favorable
   b. 250.00 unfavorable
   c. 240.00 favorable
   d. 2,800.00 favorable

PROB. 10-26 (AICPA)

AB Manufacturing Corp manufactured two products: Product A and Product B. The estimated demand for Product A was 10,000 units, and for Product B was 30,000 units. The estimated sales price per unit for Product A was P6.00 and for Product B was P8.00. The actual demand for Product A was 8,000 units, and for Product B was 33,000 units. The actual price per unit for Product A was P6.20 and for Product B was P7.70. What amount would be the total selling price variance for AB Manufacturing Corp?

a. P3,700 unfavorable
b. P8,300 unfavorable
c. P3,700 favorable
d. P14,100 favorable

PROB. 10-27 (AICPA)

Union Co. uses a standard cost accounting system. The following factory overhead and production data are available for May:

Standard fixed overhead rate per direct labor hour	P 1.00
Standard variable overhead rate per direct labor hour	P 4.00
Budgeted monthly direct labor hours	40,000
Actual direct labor hours worked	39,500
Standard direct labor hours allowed for actual production	39,000
Overall overhead variance - favorable	P 2,000

What is the applied factory overhead for May?

a. 195,000
b. 197,000
c. 197,500
d. 199,500

ANSWERS – Theory of Accounts

TOA 10-1 *Suggested answer (b) Either job order or process costing*

Standard costing system costs the product at standard or predetermined costs and compares expected with actual cost. This comparison allows deviations from expected results to be identified and investigated. A standard cost system can be used in both job order and process costing systems to isolate variances.

TOA 10-2 *Suggested answer (b) Control cost*

Standard costing is used to isolate the variances between expected costs and actual costs. It allows management to measure performance and to correct inefficiencies, thereby, helping to control costs.

TOA 10-3 *Suggested answer(c) If properly used, standards can help motivate employees.*

Standards are used as a norm against which actual results may be compared. One of the benefits of a standard cost system is that it can be used to motivate employees to achieve specified goals.

TOA 10-4 *Suggested answer (c) Top management*

A standard cost is an estimate of what a cost should be under normal operating conditions based on studies by accountants and engineers. In addition, line management is usually involved in the setting of standard costs, as are quality control personnel. Top management would not be involved because cost estimation is a lower-level operating facility. Participation by affected employees in all control systems permits all concerned to understand both the performance levels desired and the measurement criteria being applied.

TOA 10-5 *Suggested answer (b) Can exist because standard costs represent what costs should be, whereas budgeted costs represent expected actual costs.*

Standard costs are predetermined, attainable unit costs. Standard cost systems isolate deviations (variances) of actual from expected costs. One advantage of standard cost is that they facilitate flexible budgeting. Accordingly, standard and budgeted costs should not differ when standards are currently attainable. However, in practice, budgeted (estimated actual) costs may differ from standard costs when operating conditions are not expected to reflect those anticipated when the standards were developed.

TOA 10-6 *Suggested answer (d) Flexible budgets*

A standard cost is an estimate of what a cost should be under normal operating conditions based on studies by accountants and engineers. Comparing actual and standard costs permits an evaluation of the effectiveness of managerial performance. Because of the impact of fixed costs in most businesses, a standard costing system is usually not effective unless the company also has a flexible budgeting system. Flexible budgeting uses standard costs to prepare budgets for multiple activity levels.

TOA 10-7 *Suggested answer (d) Engineering standards based on attainable performance*

Standard costs are often based on the results of time and motion studies or other types of engineering standards. These standards must be accepted by those who will carry them out if they are to have maximum effectiveness.

TA 10-8 *Suggested answer (c) The actual equivalent units are multiplied by the standard cost per unit.*

A process costing system is used to account for continuous production of homogeneous products. Equivalent units of production are calculated to determine how many complete units could have been produced. To

determine the cost of the units produced, these equivalent units of production are multiplied by the standard cost per unit.

TOA 10-9 *Suggested answer (c) Cost of goods sold and inventories.*

Allocation of variances, if the amount is material, to cost of goods sold and inventories based on production and sales for the period will effectively convert standard costing to actual costing.

TOA 10-10 *Suggested answer (d) Overhead is composed only of variable costs.*

Actual overhead and predetermined amounts of overhead are most likely to be similar if overhead is composed primarily of variable costs. In principle, unit variable overhead should fluctuate little with the activity level.

TOA 10-11 *Suggested answer (b) Standard cost*

TOA 10-12 *Suggested answer (b) Flexible budget variance*

A flexible budget is a series of several budgets prepared for many levels of activity. A flexible budget allows adjustment of the budget to the actual level before comparing the budgeted and actual results. The difference between the flexible budget and actual figures is known as the flexible budget variance.

TOA 10-13 *Suggested answer* (a) *A flexible amount minus a static budget amount.*

The sales volume variance assumes that, unit prices and costs and total fixed costs remain constant. The only variable is the sales activity level. Thus, the difference between a given flexible budget amount and the corresponding static budget amount is the sales volume variance.

TOA 10-14 *Suggested answer (d) Budgeted unit price times the difference between actual inputs and budgeted inputs for the actual activity level achieved.*

An efficiency variance compares the actual use of inputs with the budgeted quantity of inputs allowed for the activity level achieved. The variance equals this difference multiplied by the budgeted unit price. The result is to isolate the cost effect of using more or fewer units of inputs than budgeted.

TOA 10-15 *Suggested answer (d) Production*

Responsibility for variances should bear some relationship to the decision and control processes used. Material usage should be the primary responsibility of the production management personnel.

TOA 10-16 *Suggested answer (a) Production and industrial engineering*

The material efficiency variance is the difference between actual and standard quantities used in production, times the standard price. An unfavorable material efficiency variance is usually caused by waste, shrinkage, or theft. Thus, it may be the responsibility of the production department because excess usage would occur while the materials are in that department. Similarly, industrial engineering may play a role because it is responsible for the design of the production process.

TOA 10-17 *Suggested answer (b) Material usage variance*

The material usage variance measures the excess amount of materials used over the amount specified in the standards. The material usage variance, when unfavorable, is often attributed to waste, shrinkage, or theft in the production areas. The excess usage occurs under the supervision of the production department.

TOA 10-18 *Suggested answer (d) Actual direct materials used is lower than the standard quantity of direct materials*

TOA 10-19 *Suggested answer (a) Price increases for raw materials.*

A standard cost system differentiates the expected cost from the actual cost. Thus, deviations from expected results are identified on a routine basis. An increase in the actual price of raw materials over the standard price will result in an unfavorable price variance.

TOA 10-20 *Suggested answer (a) Price (rate) variance*

This is the definition of price (rate) variance. Note that the Materials price variances can be recorded at the time materials are purchased *(referred to as a materials purchase price variance) or at the time materials are* issued *to the factory (referred to as a materials price usage variance).The direct materials purchase price variance is the difference between the actual price per unit and the standard price per unit, multiplied by the actual quantity* purchased. *While the direct materials price usage variance is the difference between the actual price per unit and the standard price per unit, multiplied by the actual quantity* used.

TOA 10-21 *Suggested answer (b) Actual direct materials purchased*

TOA 10-22 *Suggested answer (d) Determining price and usage variances allows management to evaluate the efficiency of the purchasing and production functions.*

A standard cost system differentiates expected cost from actual cost, which allows deviations from expected results to be identified on a timely basis. An overall variance may include both unfavorable and favorable variances. Separate analyzing the components of the overall variance results in more useful information. Thus, the price variance is used to evaluate the purchasing department, and the usage variance pinpoints any production inefficiencies.

TOA 10-23 *Suggested answer. (d) Sales volume of the product.*

An unfavorable materials quantity or usage (efficiency) variance can be caused by a number of factors, including waste, shrinkage, theft, poor performance by production workers, non-skilled workers, or the purchase of below standard quality materials by the purchasing department. Engineering changes in design of the production process or of the product

can also affect the quantity of materials used. However, sales volume should not be a contributing factor to a materials efficiency variance.

TOA 10-24 *Suggested answer (a)*

TOA 10-25 *Suggested answer (b) Actual hours exceed standard hours.*

A debit balance in the direct labor efficiency variance denotes an unfavorable labor efficiency variance; where, actual hours exceed standard hours.

TOA 10-26 *Suggested answer (d) Labor efficiency*

The efficiency of the employees varies with how long they have been performing the particular task. Thus, more experienced employees are expected to be more efficient, which affects the labor efficiency variance.

TOA 10-27 *Suggested answer (b) Unfavorable*

If variable overhead is applied to production on the basis of direct labor hours, then both the variable overhead efficiency variance and the direct labor efficiency variance will be calculated on the basis of the same number of hours. Therefore, if the labor efficiency variance is unfavorable, then the ***overhead efficiency variance will also be unfavorable*** *because both are based on the difference between standard and actual labor hours worked.*

TOA 10-28 *Suggested answer (a) Debit to labor efficiency variance*

TOA 10-29 *Suggested answer (d) Labor rate*

A standard cost system differentiates the expected cost from the actual cost. Thus, deviations from expected results can be identified on a routine basis. Depending on the circumstances, the premium paid for overtime hours may be treated as overhead or as a direct labor cost. In the latter case, it increases the labor rate and is reflected in the labor rate variance.

TOA 10-30 *Suggested answer (a) Total labor variance*

The total actual labor cost is determined by multiplying the actual labor rate times the actual labor hours. The total standard cost for good output is determined by multiplying the standard rate times the standard hours allowed. The total labor rate variance is the difference between the total actual labor costs and the total standard labor costs.

TOA 10-31 *Suggested answer (c) Efficiency variance*

TOA 10-32 *Suggested answer (a) Zero*

The volume variance is the difference between the budgeted fixed factory overhead and the amount applied based upon standard input allowed for good output. Thus, given no difference between the predetermined activity level and the standard input allowed for the actual output, no variance occurs.

TOA 10-33 *Suggested answer (a) Overhead volume*

The volume variance measures the effect of not operating at the budgeted activity level. This variance can be caused by insufficient sales or a labor strike. These events are out of the production supervisor's control. Thus, the production volume variance is the least controllable by a production supervisor.

TOA 10-34 *Suggested answer: (d) volume variance*

TOA 10-35 *Suggested answer (b) Net overhead variance*

The net factory overhead variance is the difference between the sum of actual fixed and variable factory overhead and the sum of the fixed and variable factory overhead applied.

SOLUTIONS - Problems

PROB. 10 - 1 *Suggested answer (a)*

Work in process (45 x P12)	540	
DL efficiency variance [(50 – 45) x P12]	60	
DL price variance [(P12 – 10) x 50]		100
Accrued payroll (50 x P10)		500

The journal entry to record accrued payroll is to charge work in process at the standard wage rate times the standard number of hours and to credit accrued payroll for the actual amount of payroll. The project requires more hours but a lower wage rate than estimated; hence, the labor efficiency variance will be unfavorable and the labor price variance will be favorable.

PROB. 10 - 2 *Suggested answer (d)*

Fixed overhead applied (2,000 x 15)	30,000	
Production volume variance		
[31,500 - (2,000 x P15)]	1,500	
Fixed overhead control		31,500

Where "actual fixed factory overhead is equal to the budgeted amount," the budget (spending variance) is zero; thus the difference is attributed solely to production volume variance. The volume variance is unfavorable because fixed overhead is underapplied, as shown above; thus the journal entry.

PROB. 10 - 3

a. Suggested answer (c)

Variable overhead control (P5 x 530)	2,650	
Payroll payable		2,650

The journal entry to record the actual variable overhead incurred is to charge the variable overhead control account with a corresponding credit to accounts payable or any other appropriate account.

b. Suggested answer (a)

Work in process (530 x 4.50)	2,385	
Variable overhead applied		2,385

The journal entry to record the variable overhead applied is to charge the work in process with a corresponding credit to variable overhead applied using the predetermined overhead rate.

PROB. 10-4 *Suggested answer (c)*

Work in process (450 x P9)	4,050	
DM price variance [500 x (P10-9)]	500	
DM quantity variance [(500 – 450) x P9]	450	
Inventory (500 x P10)		5,000

Note: In this case, all direct materials variances are recorded at the time work in process is charged; thus, material price variance and the materials quantity variance must be calculated.

PROB. 10-5 *Suggested answer* (c) P3,400

Materials price variance = (AP - SP) x Actual Qty. purchased

P3,600 = (P3.60 - SP) x 18,000
P3,600 = P64,800 - 18,000 SP
Std. Unit price = P61,200/ 18,000
Std. Unit price = P 3.40 unfavorable *

Actual quantity	15,000
Standard quantity	16,000
Variance	1,000 f
Multiply by standard pice	3.40
Materials usage variance	P 3,400 f

*Again, **materials quantity (or usage) variance** is computed by a comparison of the actual quantity of materials used with the standard quantity allowed.*

both measured at standard cost (actual quantity used - standard quantity allowed x standard rate). Based on the foregoing information, the standard rate was not directly provided; thus, since the computations of ***materials price variance*** *considers the standard rate and the unfavorable variance of P3,600 was provided, the standard rate was determined at P3.40, as shown above.*

PROB. 10-6 *Suggested answer* (a) P 0 P 0 P900

A ***material usage variance*** *is a variance recorded at the time materials are issued to the factory. It measures the actual amount of materials used against the standard amount that should have been used given the level of output. Therefore, the material usage variance should be charged entirely to the* ***manufacturing department****, the only department with control over usage of material.*

PROB. 10-7 *Suggested answer (b)*

Inventory [(650/P5) x P4]	520	
DM price variance [(P5 – 4) x (650/P5)]	130	
Accounts payable		650

Inventory account is charged for the actual quantity purchased times the standard unit price in the amount of P520. The difference between the actual and standard prices is the price variance.

PROB. 10-8 *Suggested answer* (b) P420 favorable

	Qty.	Price	Total
Actual	4,200	P2.40	P10,080
Standard	4,000	2.50	10,000
Variance	200 u	P0.10 f	P 80 u

Material purchase price variance
(4,200 x P0.10 f) P 420 favorable

*A **standard cost** is the predetermined cost of manufacturing a single unit or a specific quantity of product during a specific period. A standard cost has two components: 1.) a **physical standard** (a standard quantity of inputs per unit of output), and 2.) a **price standard** (a standard cost or rate per unit of input). **Variance** is the difference between standard and actual result. If the actual cost exceeds the standard cost, the variance is referred to as "**unfavorable**", because the excess has an unfavorable effect on income. Conversely, if the standard cost exceeds the actual cost, the variance is referred to as "**favorable**", because it has a favorable effect on income. If actual price paid is more or less than the standard price, a **price variance** occurs. Materials price variance can be recorded at the time materials are purchased (referred to as **material purchase price variance**) or at the time materials are issued to the factory (referred to as **materials price usage variance**).*

***Materials price variance,** in this case, is the difference between actual unit price and standard unit price multiplied by the actual quantity purchased. Based on the data presented above, where the actual unit price (P2.40) is less than the standard unit price (P2.50) the difference (P0.10) is a favorable variance, because it has a favorable effect on income. Therefore, the total amount saved is P420 - favorable (P0.10 x 4,200).*

***Materials quantity (usage) variance** is the difference between the actual quantity used and the standard quantity multiplied by standard price per unit. Incidentally, the materials quantity (usage) variance is P500 unfavorable (200 u x P2.50). Since two major factors enter into the determination of standards of direct materials cost: 1.) the quantity (usage) standard, and 2.) the price standard, the total unfavorable materials cost variance, as shown above, in the amount of P80.00 is composed of **favorable materials price variance** of P420 and **unfavorable materials quantity (usage) variance** of P500.*

PROB. 10-9 *Suggested answer* (c) P140 unfavorable

	Qty.	Price	Total
Actual (purchased)	1,400	P 1.10	P1,540
Standard	1,300	1.00	1,300
Variance	100 u	P 0.10 u	P 240 u

Materials purchase price variance (1,400 x P0.10 u)	P 140 unfavorable

It should be pointed out that the requirement is to determine the ***materials purchase price variance*** *(actual unit price - standard unit price x actual quantity purchased) for the month of June. Thus, the actual and standard cost per unit for the month of June was used.*

PROB. 10-10 *Suggested answer* (d) P7.50

Let X = input quantity

$$X - 20\%X = 2 \text{ yards}$$
$$80\%X = 2 \text{ yards}$$
$$X = 2.5 \text{ yards}$$

Standard direct materials cost per unit of finished product (2.5 yards x P3)	P 7.50

A ***standard cost*** *is the predetermined cost of manufacturing a single unit or a specific quantity of product during a specific period. It is the planned cost of a product under current and/or anticipated operating conditions. A standard is like a norm. Whatever is considered normal can generally be accepted as standard. A standard should be thought of as a norm for production inputs, such as units of materials, hours of labor, and percentage of plant capacity used.*

Given this 20% of direct materials spoilage is calculated on input quantities occurs during the manufacturing process, it was assumed that the spoilage is normal and should form part of the product's standard cost. Therefore, to determine the output quantities, spoilage must be deducted from input quantities, as shown above.

PROB. 10-11

a. *Suggested answer* (d) P600 unfavorable

Actual unit price (P18,000/ 12,000)	P 1.50
Less standard unit price	1.45

Unfavorable direct materials price variance per unit	0.05
Multiply by actual quantity purchased	12,000
Unfavorable direct materials price variance	P 600

The difference between actual price per unit and standard price per unit of direct materials purchased results in the direct materials price variance per unit; when multiplied by the actual quantity purchased will result in the total ***direct materials price variance****. The variance is unfavorable because the actual unit price is more than the standard unit price.*

b. *Suggested answer* (a) P1,450 unfavorable

Actual quantity used	10,000
Less standard quantity allowed (3 x 3,000)	9,000
Unfavorable materials efficiency variance	1,000
Multiply by standard unit price	1.45
Unfavorable materials efficiency variance for May	P 1,450

The difference between actual quantity used and the standard quantity allowed for production multiplied by the standard unit price equals the ***direct materials quantity (usage or efficiency) variance****. The variance is unfavorable because the actual quantity used is more than the standard quantity allowed.*

PROB. 10-12

a. *Suggested answer* (b) P2.50

Standard cost per unit of final product (P60,000/ 12,000 units)	P 5.00
Divide by required raw materials to produce one unit of final product	2
Standard price for one unit of materials	P 2.50

The requirement is to determine the standard price for one unit of materials. Given the total standard cost for raw materials (P60,000) and actual production (12,000), the resulting amount is the standard cost per unit of finished product. But it should be pointed out that each unit of finished

product requires two units of raw materials, thus the above, standard price for one unit of materials.

b. *Suggested answer* (d) 25,000

Standard input allowed for raw materials (12,000 x 2)	24,000
Add additional units used (unfavorable materials quantity variance) (P2,500/2.50)	1,000
Actual units of materials used in November	25,000

The unfavorable materials quantity variance signifies that the actual quantity used was greater than the standard input allowed, thus, to determine the actual units of materials used to produce November output, the equivalent units of raw materials of this unfavorable quantity variance should be added to standard input allowed.

c. *Suggested answer* (c) 12,500 unfavorable

Actual unit price (P105,000/ 35,000 units)	P 3.00
Less standard unit price "a"	2.50
Unfavorable direct materials price variance per unit	0.50
Multiply by actual quantity used	25,000
Materials price variance for the units used (unfavorable)	P 12,500

*The requirement is to determine the **materials price variance** for the **units used** in November. However, **materials price variance** is the difference between actual unit price of direct materials purchased and standard unit price of direct materials purchased multiplied by the actual quantity purchased. It should be noted that the actual quantity purchased is used instead of the actual quantity used, since it is the act of purchasing and not requisitioning that give rise to a price variance. And if the unfavorable direct materials price variance per unit (P0.50) will be multiplied by the actual quantity purchased (35,000 units), the resulting unfavorable materials price variance (P17,500) is none of the given choices. Since, **materials price variance for the units used** (requirement) is unusual, it was assumed that the **actual units of materials used** to produce November output may be used.*

Furthermore, answer (a) is incorrect because P2.500 unfavorable is the material quantity variance; answer (b) and (d) are incorrect because the unfavorable direct materials price variance per unit is P0.50; and answer (e) is incorrect because the price variance is unfavorable.

PROB. 10-13

1. *Suggested answer; (d) 400 unfavorable*

Material price variance [(6-5) x 400 units]	400 unfavorable

2. *Suggested answer: (c) 250 favorable*

Material usage variance [(250 – 300) x 5]	250 favorable

PROB. 10-14 *Suggested answer* (b) P2,400

	Time	Rate	Total
Actual	4,100	P24.40	P100,040
Standard (1,000 x 4)	4,000	24.00	96,000
Variance	100 u	P 0.40 u	P 4,040 u

Labor efficiency variance (100 u x P24.00)	P 2,400 unfavorable

The requirement is to compute the unfavorable direct labor efficiency (time) variance. Given an actual hours to produce a product of 4,100 hours and standard hours of 4,000 resulting to unfavorable 100 hours, then multiplied by the standard rate, the direct labor efficiency variance is P2,400 ***unfavorable****.*

Incidentally, the labor rate (price) variance is P1,640 unfavorable (4,100 x P0.40 u). Since the total labor cost variance is composed of the labor efficiency variance of P2,400 ***unfavorable*** *and labor rate variance of P1,640*

***unfavorable**, the total labor cost variance should be P4,040 **unfavorable**, as shown above.*

PROB. 10-15 *Suggested answer* (d) 8,250

Labor efficiency variance	=	(Actual hrs. - std. hrs.) x std. rate
P5,250 favorable	=	(AH - 9,000) x P7.00
Actual hours	=	8,250

*The requirement is to determine the actual hours worked for the month. Given the labor efficiency (time) variance of P5,250 **(favorable)**, the actual hours worked should be 8,250 hours.*

PROB. 10-16 *Suggested answer* (d) P1,275 unfavorable

Actual direct labor cost	P 77,775
Less standard direct labor cost [8,500 x (P81,000/ 9,000)]	76,500
Unfavorable direct labor price variance	P 1,275

The requirement is to determine the resulting favorable or unfavorable variance based on flexible budget for direct labor and materials. Given the actual output in direct materials of P127,50 and the standard cost of materials for 8,500 units is P127,500 (8,500 x 15), no variance arose with respect to direct materials.

*Because the actual direct labor cost is greater than the budgeted amount, as shown above, the difference (P1,275) is unfavorable direct labor variance. Although two major factors enter into the determination of standards of direct labor cost (labor price/rate and labor efficiency/time), no labor efficiency variance was incurred, because the actual time per unit (45 minutes) was the same as that budgeted. Hence, the entire P1,275 unfavorable variance must be attributable to the **labor rate (or price) variance.***

PROB. 10-17 *Suggested answer (d) P7.00*

10,000 (SR – 7.50) = 5,000 unfavorable
SR = 7.50 - (5,000/10,000)
SR = P 7.00

The labor rate variance equals actual hours times the difference between the actual and standard rates. The variance is unfavorable, so the standard rate must be less than the actual rate, thus, deducted.

PROB. 10-18 *Suggested answer* (a) P30

Total direct manufacturing labor cost per week, per worker [P500 + (20% x 500)]	P 600
Divide by number of hours per week	40
Standard rate per hour	15
Multiply by number of hours required for each unit	2
Standard direct manufacturing labor cost per unit	P 30

*Again, a **standard cost** is the predetermined cost of manufacturing a single unit or a specific quantity of product during a specific period. It is the planned cost of a product under current and/or anticipated operating conditions. A standard is like a norm. Whatever is considered normal can generally be accepted as standard. A standard should be thought of as a norm for production inputs, such as units of materials, hours of labor, and percentage of plant capacity used.*

PROB. 10-19 *Suggested answer* (a) P117,600

Labor rate variance = (Actual rate - std. rate) x Actual hrs.
P8.400 favorable = (AR - P6.30) x 20,000
Actual rate = P 5.88

Total actual direct labor cost (20,000 x P5.88) P 117,600

The requirement is to determine the total actual direct labor cost for the month of March 1998. Given the labor rate (price) variance of P8,400

***(favorable)**, the actual rate is P5.88 then multiply by actual direct labor hours, thus the actual direct labor cost is P117,600.*

Since variance is the difference between actual and standard, an alternative approach to compute the total actual direct labor cost is by working back, as shown below.

Total actual direct labor cost	P 117,600
Standard cost @ actual hours (P6.30 x 20,000)	126,000
Favorable labor rate variance (given)	P 8,400

PROB. 10-20

1. *Suggested answer (a) 600 favorable*

Labor rate variance [(80-100) x 30 hours]	600 favorable

2. *Suggested answer (b) 1,000 unfavorable*

Labor efficiency variance [(30-20) x 100]	1,000 unfavorable

PROB. 10-21 *Suggested answer* (b) P1,500 unfavorable

Actual direct manufacturing labor hours at standard rate (10,500 x P3.00)	P 31,500
Standard direct manufacturing labor hours at standard rate [(5,000 x 2) x P3.00]	30,000
Unfavorable variable overhead efficiency variance	P 1,500

*The requirement is to determine the unfavorable **variable overhead efficiency variance,** which is the difference between the actual direct manufacturing labor hours at standard rate and the standard direct manufacturing labor hours at standard rate. The variance is unfavorable because actual labor hours exceeded the standard labor hours.*

PROB. 10-22 *Suggested answer* (d) P10,000 favorable

Budget allowance based on standard hours allowed :		
Variable overhead (26,000 x 2) x (3,600,000/ 600,000)	312,000	
Budgeted fixed overhead	250,000	P 562,000
Factory overhead applied at standard (26,000 x 2) x 11		572,000
Volume variance (favorable)		P (10,000)

Volume variance is the difference between the budget allowance based on the standard amount of the allocation base allowed for actual production and the standard factory overhead chargeable to work in process.

PROB. 10-23

a. *Suggested answer* (b) P5,400 unfavorable

	Qty.	Price	Total
Actual	18,000	P 13.80	P 248,400
Standard (20 x 500)	10,000	13.50	135,000
Variance	8,000 u	P 0.30 u	P 113,400 u

Materials purchase price variance (18,000 x P0.30 u)	P 5,400 unfavorable

Based on the foregoing information, the actual purchase price per unit (P13.80) is more than the standard price per unit (P13.50) resulting to ***unfavorable variance*** *(P0.30).*

Since materials purchase variance is the difference between the actual price per unit and the standard price per unit, multiplied by the actual quantity purchased, therefore, the correct answer is P5,400 unfavorable.

b. *Suggested answer* (c) P6,750 favorable

	Qty.	Price	Total
Actual	9,500	P13.80	P131,100
Standard (20 x 500)	10,000	13.50	135,000
Variance	500 f	P 0.30 u	P 3,900 f

Materials usage variance
(500 f x P13.50) P 6,750 favorable

Materials quantity (usage) variance *is the difference between the actual quantity used and the standard quantity multiplied by standard price per unit. Based on the foregoing information, the actual quantity used (9,500 yards) is less than the standard quantity (10,000 yards) resulting to favorable variance (500 yards), therefore, the materials usage variance is P6,750 favorable.*

As mentioned earlier, two major factors enter into the determination of standards for direct materials cost: ***1.)*** *the quantity (or usage) standard, and* ***2.)*** *the price standard. If the actual quantity of direct materials used in producing a commodity differs from the standard quantity, there is a* ***materials quantity variance****; while, if the actual unit price of the materials differs from the standard price, there is a* ***materials price variance.***

c. *Suggested answer* (c) P3,150 unfavorable

	Time	Rate	Total
Actual	2,100	P 91.50	P 192,150
Standard (4 x 500)	2,000	90.00	180,000
Variance	100 u	P 1.50 u	P 12,150 u

Labor rate variance
(2,100 x P1.50 u) P 3,150 unfavorable

Direct labor rate variance *is the difference between the actual rate per hour and the standard rate per hour multiplied by the actual hours worked. Based on the foregoing information, the actual rate per hour (P91.50) is more than the standard rate per hour (P90.00) resulting to unfavorable variance (P1.50), therefore, the labor rate variance is P3,150 unfavorable.*

d. *Suggested answer* (d) P9,000 unfavorable

	Time	Rate	Total
Actual	2,100	P 91.50	P 192,150
Standard (4 x 500)	2,000	90.00	180,000
Variance	100 u	P 1.50 u	P 12,150 u

Labor efficiency variance
100 u x P90.00) P 9,000 unfavorable

Labor efficiency variance *is the difference between the actual hours worked and the standard hours multiplied by the standard rate per hour. Based on the foregoing information, the actual hours worked (2,100 hours) is more than the standard hours (2,000 hours) resulting to unfavorable variance (100 hours), therefore, the labor efficiency variance is P9,000 unfavorable.*

As in the case of direct materials, two major factors enter into the determination of standards of direct labor cost: 1.) the time (efficiency or usage) variance standard, and 2.) the rate (price or wage) standard. If the actual direct labor hours spent in producing a product differ from the standard hours, there is an ***labor efficiency variance****; while is the labor rate paid differs from the standard rate, there is a* ***labor rate variance.*** *Thus, the* ***total unfavorable labor cost variance*** *shown above in the amount of P12,150 is made up of* ***unfavorable labor rate variance*** *of P3,150 and* ***unfavorable labor efficiency variance*** *of P9,000.*

PROB. 10-24 *Suggested answer* (c) P5,000 favorable

Flexible budget (variable costs) for a production level of 80,000 units (80,000 x 4)	P 320,000
Fixed cost (100,000 x 2)	200,000
Total flexible budget costs	520,000
Less Actual costs	515,000
Favorable manufacturing cost variance	P 5,000

The flexible budget includes variable costs and fixed costs remain constant, thus, the excess of flexible budget costs over the given actual costs is a favorable manufacturing cost variance, as shown above.

PROB. 10-25

a. *Suggested answer* (a) P240.00 favorable

Material price variance = (AP - SP) x AQ purchased
= (P3.45 - 3.50) x 4,800
= P 240.00 favorable

The requirement is to determine the material price (purchase) variance. Given the materials used and no materials purchased was mentioned, it was assumed that the materials purchased is equal to materials used. Note that the actual price per unit is less than the standard price per unit, the effect is favorable to income, thus the variance is favorable.

b. *Suggested answer* (b) P315.00 unfavorable

Labor rate variance = (AR - SR) x Actual hours
= (P1.80 - 1.75) x 6,300
= P 315.00 unfavorable

The requirement is to determine the labor rate variance. Given the actual rate per hour of P1.80 which is more than the standard rate per hour of P1.75, the effect to income is unfavorable, thus, the variance is unfavorable.

c. *Suggested answer* (d) P3,040 favorable

	Qty.	Price	Total
Actual	4,800	P3.45	P16,560
Standard (7 x 800)	5,600	3.50	19,600
Variance	800 f	P0.05 f	P 3,040 f

The requirement is to determine the total material variance, which is composed of favorable material price variance of P240 (4,800 x P0.05 f) and favorable material quantity variance of P2.800 (800 f x P3.50), because, as in the case of labor cost variance, two major factors enter into the determination of standards of material cost variance.

d. *Suggested answer* (d) P2,800 favorable

= (4,800 - 5,600) x 3.50
= P2,800 favorable

The requirement is to determine the material quantity variance. Given the actual quantity used which is less than the standard quantity, this will result to a favorable variance, because the effect of which to income is favorable.

PROB. 10-26 *Suggested answer (b) P8,300 unfavorable*

Selling price variance – Product A [(6.20-6.00) 8,000]	P 1,600 favorable
Selling price variance – Product B [(7.70-8.00) 33,000]	9,900 unfavorable
Total selling price variance	P 8,300 unfavorable

The total selling price variance is the difference between the actual and estimated selling price for each product and multiplying it by the actual sales volume for the product.

PROB. 10-27 *Suggested answer (a) P195,000*

Standard fixed overhead rate per DLH	P 1.00
Standard variable overhead rate per DLH	4.00
Total standard overhead rate per DLH	5.00
Multiply by standard DLH allowed	39,000
Applied factory overhead	P 195,000

The applied factory overhead equals the standard direct labor hours allowed for actual production multiplied by the total standard overhead rate per hour.

Chapter 11

ACTIVITY-BASED AND JUST-IN-TIME/BACKFLUSH COSTING

Introduction

Traditional product costing methods assume that individual product cause costs. When the major cost components of a product are direct materials, direct labor, or overhead that can be directly associated with individual products, traditional methods are quite accurate. In situations where manufacturing overhead is a significant cost and is *not directly* related to volume of products, traditional product costing methods can generate *inaccurate* product costs. These inaccurate product costs can lead to poor decision-making regarding product marketing, product design, investment, and budgeting issues, causing the company to be less competitive. Overhead allocation is most troublesome in multiple-product companies.

The **Activity-Based Costing** (ABC) is relatively new in the field of accounting, but its practical implementation of the concepts in the field of strategic planning has been known for so many years. The objective of ABC is to trace overheads to product costs as accurately as possible. Activities, such as production scheduling, supervising and setting up, must be identified for cost accumulation. And *cost drivers*, such as the number of production runs and the number of set-ups, must be defined for allocating the accumulated overheads to products benefiting from the activities. These pools are the *cost centers*, and the cost drivers from the bases of overhead recovery rates.

Just as ABC can lead to cost savings and improved product quality, another new management development, **Just-in-Time** (JIT) inventory system, can also reduce manufacturing cost and improve product quality. Essentially, JIT is a process by which only enough materials to satisfy immediate production are shipped to the job site. When JIT is functioning perfectly, companies take delivery from suppliers only as raw materials are needed for production and complete all inventories started during the day. Furthermore, inventory is completed only when ordered by customers and can be shipped immediately. As the name implies, materials are delivered "*just in time*" for production, and goods are manufactured "*just in time*" to meet customers' needs.

= (4,800 - 5,600) x 3.50
= P2,800 favorable

The requirement is to determine the material quantity variance. Given the actual quantity used which is less than the standard quantity, this will result to a favorable variance, because the effect of which to income is favorable.

PROB. 10-26 *Suggested answer (b) P8,300 unfavorable*

Selling price variance – Product A [(6.20-6.00) 8,000]	P 1,600 favorable
Selling price variance – Product B [(7.70-8.00) 33,000]	9,900 unfavorable
Total selling price variance	P 8,300 unfavorable

The total selling price variance is the difference between the actual and estimated selling price for each product and multiplying it by the actual sales volume for the product.

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Standard variable overhead rate per DLH	4.00
Total standard overhead rate per DLH	5.00
Multiply by standard DLH allowed	39,000
Applied factory overhead	P 195,000

The applied factory overhead equals the standard direct labor hours allowed for actual production multiplied by the total standard overhead rate per hour.

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Just as ABC can lead to cost savings and improved product quality, another new management development, **Just-in-Time** (JIT) inventory system, can also reduce manufacturing cost and improve product quality. Essentially, JIT is a process by which only enough materials to satisfy immediate production are shipped to the job site. When JIT is functioning perfectly, companies take delivery from suppliers only as raw materials are needed for production and complete all inventories started during the day. Furthermore, inventory is completed only when ordered by customers and can be shipped immediately. As the name implies, materials are delivered "*just in time*" for production, and goods are manufactured "*just in time*" to meet customers' needs.

Backflush costing is a streamlined cost accounting method that speeds up, simplifies, and minimizes accounting effort in an environment that minimizes inventory balances, requires few allocations, uses standard costs, and has minimal variances from standard. It is applicable to mature JIT systems in which velocity is so high that traditional accounting is impractical.

ACTIVITY-BASED COSTING

As defined, it is a cost accounting system that focuses on the various activities performed in an entity and collects costs on the basis of the underlying nature and extent of those activities.

The three fundamental components of this costing system are: 1.) identifying the several levels of costs that exist; 2.) accumulating into related cost pools; and 3.) assigning costs to products and services using the multiple cost drivers.

Levels of Costs and Drivers

ABC recognized activities at different levels of aggregation within a production environment. The four levels are the *unit, batch, product, and plant*. The different levels are simply different degrees of data aggregation. A batch is the sum of the units that make it up. A product is an aggregation of many batches. A plant can be thought of as an aggregation of all its products. In ABC, the bases used to allocate overhead costs are called *drivers*. A *resource driver* is a base used to allocate the cost of a resource to the different activities using that resource. An *activity driver* is a base used to allocate the cost of an activity to products, customers, or other final cost objects.

JUST-IN-TIME COSTING

As defined, it is a philosophy centered on the reduction of costs through elimination of inventory. All materials and components should arrive at a work station when they are needed, no earlier, no later. Products should be completed and available to customers when the customers want them, no earlier, no later. The most visible aspect of JIT is the effort to reduce inventories of work in process and raw materials, which is called *stockless production, lean production, or zero inventory production.*

BACKFLUSH COSTING

The purpose of backflush costing is to reduce the number of events that measured and recorded in the accounting system. Compared to job order and process costing, backflush costing is known for its lack of detailed tracking of the cost of work in process. In short, inventory accounts are not adjusted throughout the accounting period to reflect all production costs; their balances are corrected instead by end of period journal entries, and there are no detailed subsidiary records maintained for units in process.

Post Manufacturing Deduction

As defined, it is a step in backflush costing in which the cost of completed work is subtracted from the balance of the work in process account or an equivalent combined raw and in process account. The backflush calculation uses end of period estimates of the actual materials and conversion cost components of all unfinished work, including any unprocessed raw materials. The cost estimates are made after a physical inventory count, which is usually done monthly or weekly.

Raw material cost is backflushed from Raw and In Process (RIP) to Finished Goods and from Finished Goods to Cost of Goods Sold based on the monthly physical counts. Direct labor and overhead costs are expensed to the cost of goods sold account. The estimated conversion cost components of the RIP and finished goods inventory account balances are adjusted at the end of each month, with the offsetting representing a correction of cost of goods sold.

MULTIPLE CHOICE – Theory of Accounts

TOA 11- 1 (Adapted)

An accounting system that collects financial and operating data on the basis of the underlying nature and extent of the cost drivers is

a. Activity-based costing.
b. Target costing.
c. Delivery cycle time costing.
d. Variable costing.

TOA 11-2 (Adapted)

Cost drivers are

a. Activities that causes costs to increase as the activity increases.
b. Accounting techniques used to control costs.
c. Accounting measurements used to evaluate whether performance is proceeding according to plan.
d. A mechanical basis, such as machine hours, computer time, size of equipment, or square footage of factory, used to assign costs to activities.

TOA 11-3 (Adapted)

A base used to allocate the cost of a resource to the different activities using that resource is called

a. Resource driver
b. Activity driver
c. Final cost object
d. Driver

TOA 11-4 (Adapted)

A base used to allocate the cost of products, customers, or other final cost objects is called

a. Resource driver
b. Activity driver
c. Final cost object
d. Driver

TOA 11-5 (AICPA)

In an activity-based costing system, what should be used to assign a department's manufacturing overhead costs to products produced in varying lot sizes?

a. A single cause and effect relationship.
b. Multiple cause and effect relationship.
c. Relative net sales values of the products.
d. A product's ability to bear cost allocations.

TOA 11-6 (Adapted)

Cost allocation is the process of assigning indirect costs to a cost object. The indirect costs are grouped in cost pools and then allocated by a common allocation base to the cost object. The base that is employed to allocate a homogeneous cost pool should

a. Have a cause and effect relationship with the cost items in the cost pool.
b. Assign the costs in the pool uniformly to cost objects even if the cost objects use resources in a non-uniform way.
c. Be a non-financial measure (e.g. number of setupts) because a non-financial measures is more objective.
d. Have a high correlation with the cost items in the cost pool as the sole criterion for selection.

TOA 11-7 (AICPA)

What is the normal effect on the numbers of cost pools and cost assignment bases when an activity-based cost system replaces a traditional cost system?

	Cost pools	Cost assignment bases
a.	No effect	No effect
b.	Increase	No effect
c.	No effect	Increase
d.	Increase	Increase

TOA 11-8 (Adapted)

Activities, their drivers, and their costs may be classified as unit level, product level, batch level, and plant level. If activity-based costing information is prepared for internal purposes, which costs are most likely to be treated as period costs?

a. Unit level.
b. Batch level.
c. Product level.
d. Plant level.

TOA 11-9 (Adapted)

The use of activity-based costing normally results in
a. Substantially greater unit costs for low-volume products than is reported by traditional product costing.
b. Substantially lower unit costs for low-volume products than is reported by traditional product costing.
c. Decreased setup costs being charged to low-volume products.
d. Equalizing setup costs for all product lines.

TOA 11-10 (Adapted)

Costs are allocated to cost objects in many ways and for many reasons. Which one of the following is a purpose of cost allocation?
a. Evaluating revenue center performance.
b. Measuring income and assets for external reporting.
c. Budgeting cash and controlling expenditures.
d. Aiding in variable costing for internal reporting.

TOA 11-11 (Adapted)

Which of the following statements about activity-based costing is not true?
a. Activity-based costing is useful for allocating marketing and distribution costs.
b. Activity-based costing is more likely to result in major differences from traditional costing systems if the firm manufactures only one product rather than multiple products.
c. In activity-based costing, cost drivers are what cause costs to be incurred.
d. Activity-based costing differs from traditional costing systems in that products are not cross-subsidized.

TOA 11-12 (AICPA)

A manufacturing company has several product lines. Traditionally, it has allocated manufacturing overhead costs between product lines based on total machine hours for each product line. Under an activity-based costing system, which of the following overhead costs would be most likely to have a new cost driver assigned to it?

a. Electricity expense
b. Repairs and maintenance expense
c. Employee benefits expense
d. Depreciation expense

TOA 11-13 (Adapted)

Activity-based management (ABM) is

a. A costing system in which multiple overhead cost pools are allocated using bases that include one or more non-volume related factors.
b. A base used to allocate the cost of a resource to the different activities using it.
c. The use of information obtained from ABC to make improvements in the firm.
d. A base used to allocate the cost of an activity to products and customers.

TOA 11-14 (AICPA)

In an activity-based costing system, cost reduction is accomplished by identifying and eliminating

	All Cost Drivers	Nonvalue-adding Activites
a.	No	No
b.	Yes	Yes
c.	No	Yes
d.	Yes	No

TOA 11-15 (AICPA)

Nile Co.'s cost assignment and product costing procedures follow activity-based costing principles. Activities have been identified and classified as being either value-adding or nonvalue-adding as to each product. Which of the following activities, used in Nile's production process, is nonvalue-adding?

a. Design engineering activity.
b. Heat treatment activity.
c. Drill press activity.
d. Raw materials storage activity.

TOA 11-16 (Adapted)

Units of production is an appropriate overhead allocation base when
a. Several well-differentiated products are manufactured.
b. Direct labor costs are low.
c. Direct materials costs are large relative to direct labor costs incurred.
d. Only one product is manufactured.

TOA 11-17 (Adapted)

Generally, individual departmental rates rather than a plant-wide rate for applying overhead would be used if
a. A company wants to adopt a standard cost system.
b. A company's manufacturing operations are all highly automated.
c. Manufacturing overhead is the largest cost component of its product cost.
d. The manufactured products differ in the resources consumed from the individual departments in the plant.

TOA 11-18 (Adapted)

Multiple or departmental manufacturing overhead rates are considered preferable to a single or plant-wide overhead when
a. Manufacturing is limited to a single product flowing through identical departments in a fixed sequence.
b. Various products are manufactured that do not pass through the same departments or use the same manufacturing techniques.
c. Individual cost drivers cannot accurately be determined with respect to cause and effect relationships.
d. The single or plant-wide rate is related to several identified cost drivers.

TOA 11-19 (Adapted)

Because of changes that are occurring in the basic operations of many firms, all of the following represent trends in the way indirect costs are allocated EXCEPT

a. Treating direct labor as an indirect manufacturing cost in an automated factory.
b. Using throughput time as an application base to increase awareness of the costs associated with the lengthened throughput time.
c. Preferring plant-wide application rates that are applied to machine hours rather than incurring the cost of detailed allocations.
d. Using several machine cost pools to measure product costs on the basis of time in a machine center.

TOA 11-20 (Adapted)

A company with three products classifies its costs as belonging to five functions: designs, production, marketing, distribution, and customer services. For pricing purposes, all company costs are assigned to the three products. The direct costs of each of the five functions are traced directly to the three products. The indirect costs of each of the five functions are collected into five separate cost pools and then assigned to the three products using appropriate allocation bases. The allocation base that would most likely be the best for allocating the indirect costs of the distribution function is

a. Number of customer phone calls.
b. Number of shipments.
c. Number of sales persons.
d. Sales volume in pesos.

TOA 11-21 (Adapted)

It is an inventory strategy a company employs to increase efficiency and decrease waste by receiving and producing goods as they are needed in the production process, thereby reducing inventory costs.

a. Just in time inventory system
b. Min-Max inventory system
c. Pareto 80-20 inventory rule
d. ABC inventory system

TOA 11-22 (AICPA)

Just-in-time processing (JIT):

a. strives to eliminate inventories.
b. uses a pull approach in manufacturing.
c. neither of the above.
d. Both (a) and (b)

TOA 11-23 (Adapted)

One of the requirements for a JIT system to be successful is
a. Cyclical production.
b. Adequate inventory stock.
c. Coupling it with job order costing.
d. High quality and balanced work loads.

TOA 11-24 (Adapted)

All of the following are terms used to describe the JIT effort to reduce inventories of work in process and raw materials, except
a. Backflush production
b. Stockless production
c. Lean production
d. ZIP production

TOA 11-25 (Adapted)

The costing system appropriate to use with a Just-in-time inventory system whose costs flow directly to cost of goods sold is
a. Activity-based costing
b. Variable costing
c. Backflush costing
d. Absorption costing

TOA 11-26 (Adapted)

It is a product costing system generally used in just-in-time inventory environment. This costing system delays the costing process until the production of goods is completed by eliminating the detailed tracking of cost throughout the production system and preparing journal entries only at trigger points.
a. Backflush costing
b. Standard costing
c. Normal costing
d. Traditional costing

TOA 11-27 (AICPA)

In backflush costing, if the conversion cost in the Raw and In Process was P500 on July 1 and P1,000 on July 31, the account to be credited at the end of July for the P500 increase would be

a. Raw and In Process
b. Finished Goods
c. Raw Materials
d. Cost of Goods Sold

MULTIPLE CHOICE – Problems

PROB. 11-1 (AICPA)

Product BDE uses 200 hours of direct labor hours and has 2,000 machine steps. The company has been considering using either direct labor hours or machine steps as the cost driver. The ratio of overhead cost to direct labor hours is P60. The assignment of overhead cost to Product BDE using the direct labor hours would result in a higher charge by P4,000 than if machine steps were used as the cost driver. What is the ratio of overhead cost to machine steps?

a. 1.00 per step
b. 2.00 per step
c. 4.00 per step
d. 6.00 per step

PROB. 11-2 (AICPA)

Newton Corp. has used a traditional cost accounting system to apply quality control costs uniformly to all products at a rate of 14.5% of direct labor cost. Monthly direct labor cost for its Product Excel is P27,500. In an attempt to distribute quality control costs more equitably, Newton is considering activity-based costing. The monthly data shown below have been gathered for Product Excel.

Activity	Cost Driver	Cost Rates	Quantity
Incoming materials inspection	Type of Materials	P11.50/type	12 types
In process Inspection	Number of Units	P0.14/unit	17,500 units
Product certification	Per order	P77/order	25 orders

What is the monthly quality control cost assigned to Product Excel using the activity-based costing?

a. P68.64 per order
b. P525.50 lower than the cost using the traditional cost system.
c. P8,500.50
d. P525.50 higher than the cost using the traditional cost system.

PROB. 11-3 (AICPA)

Believing that its traditional cost system may be providing misleading information, an entity is considering an activity-based costing approach. It now employs a full cost system and has been applying its manufacturing overhead on the basis of machine hours. The organization plans on using 50,000 direct labor hours and 30,000 machine hours in the coming year. The following data show the manufacturing overhead that is budgeted:

Activity	Cost Driver	Budgeted Activity	Budgeted Cost
Material handling	No. of parts Handled	6,000,000	720,000
Setup costs	No. of setups	750	315,000
Machining costs	Machine hours	30,000	540,000
Quality control	No. of batches	500	225,000

Cost, sales, and production data for one of the organization's product for the coming year are as follows:

Prime Costs:	
Direct material cost per unit	P 4.40
Direct labor cost per unit 0.05 direct labor hour @ P15.00/ direct labor hour	0.75
Total prime cost	P 5.15

Sales and production data:	
Expected sales	20,000 units
Batch size	5,000 units
Setups	2 per batch
Total parts per finished unit	5 parts
Machine hours required	80 machine hours per batch

If the organization employs an activity-based costing system, the cost per unit for the product described for the coming year will be

a. 6.00
b. 6.08
c. 6.21
d. 6.30

PROB. 11-4 (AICPA)

In manufacturing roller blades, Wesley Co.'s plant used 400 direct labor hours, 500 machine hours, and 20 set ups. The following overhead costs were taken from the factory accounts:

	Overhead Expenses	Volume of Activities
Machine center	P 120,000	20,000 machine hours
Set up center	40,000	100 set ups
Total	P 160,000	4,000 direct labor hours

The plant was using a factory-wide overhead rate based on direct labor hours. A new ABC system will use machine hours in the Machining Department and number of set ups in the Set up Department as cost drivers. By what amount would overhead costs assigned to roller blades differ between the prior system and the ABC system?

a. 7,800
b. 7,000
c. 5,000
d. 4,800

PROB. 11-5 (AICPA)

Hackers Corp. accumulated the following cost information for its two products, A and B:

	A	B	Total
Production volume	2,000	1,000	
Total direct labor hours	5,000	20,000	25,000
Setup cost per batch	P 1,000	P 2,000	
Batch size	100	50	
Total setup cost incurred	P 20,000	P 40,000	P 60,000
Direct labor hour per unit	2	1	

A traditional costing system would allocate setup costs on the basis of direct labor hours. An ABC system would trace costs by spreading the cost per batch over the units in a batch. What is the setup cost per unit of Product A under each costing system?

	Traditional	ABC
a.	4.80	10.00
b.	2.40	10.00
c.	40.00	200.00
d.	4.80	20.00

PROB. 11-6 (Adapted)

New Wave Co. produces two products, Product Side A and Product Side B. Units produced for the period totaled 13,625 for Side A and 11,100 for Side B. Total manufacturing overhead cost are P550,000. The company uses the activity-based costing in allocating its manufacturing overhead cost. The following additional information were gathered:

		Product		
Activity	Cost Driver	A	B	Total
Setups	No. of setups	100	400	100,000
Machining	Machine hours	3,000	2,000	400,000
Inspections	No. of inspections	100	300	50,000

a. What would be the overhead rate for each activity?

	Setups	Machining	Inspections
a.	200.00	80.00	125.00
b.	100.00	40.00	62.50
c.	183.33	183.33	183.00
d.	25.00	45.00	20.00

b. How would the total overhead cost of P550,000 be allocated between Products Side A and Side B?

	Side A	Side B
a.	640,000	540,000
b.	586,656	494,991
c.	275,000	275,000
d.	272,500	277,500

c. What would be the overhead cost per unit for Products Side A and Side B?

	Side A	Side B
a.	P 46.97	P 48.65
b.	43.06	44.59
c.	20.18	24.77
d.	20.00	25.00

PROB. 11-7 (Adapted)

Super Glass Co. is preparing its annual profit plan. As part of its analysis of the profitability of individual products, the controller examines the amount of

overhead that should be assigned to the individual product lines from the information given as follows:

	Ordinary Glass	Special Glass
Units produced	25	25
Material moves per product line	5	15
Direct labor hours per unit	200	200

Budgeted materials handling costs, P50,000.

a. Under a costing system that assigns overhead on the basis of direct labor hours, what is the material handling cost allocated to one unit of ordinary glass?
   a. 1,000
   b. 500
   c. 2,000
   d. 5,000

b. Under activity-based costing system, what is the material handling cost assigned to one unit of ordinary glass?
   a. 1,000
   b. 500
   c. 1,500
   d. 2,500

PROB. 11-8 (Adapted)

Factory Co. makes two products, X and Z. X is being introduced this period, whereas Z has been in production for 2 years. For the period about to begin, 1,000 units of each product are to be manufactured. Assume that the only relevant overhead item is the cost of engineering change orders; that X and Z are expected to require 8 and 2 change orders, respectively; that X and Z are expected to require 2 and 3 machine hours, respectively; and that the cost of a change order is P600. If Factory Co. applies engineering change order costs on the basis of machine hours, the cross-subsidy per unit arising from this peanut-butter costing approach is

a. 1.20
b. 2.40
c. 3.60
d. 4.80

PROB 11-9 (Author)

An entity is choosing between traditional costing and activity-based costing. The following data are provided:

Activity-Based Costing

Activity Center	Cost Driver	Amount of Activity	Center Cost
Material handling	Kilos handled	100,000 kg	P 200,000
Painting	Units painted	50,000units	300,000
Assembly	Machine hours	10,000 hrs	500,000

Traditional Costing

Traditional	Labor hours	100,000 hrs	1,000,000

Job 1 contains 3,000 units. It weights 10,000 kilos and uses 300 machine hours. The direct labor hours on the job is 7,000 hours.

a. What is the applied overhead under traditional costing?
   a. 70,000
   b. 60,000
   c. 80,000
   d. 50,000

b. What is the applied overhead under Activity Based Costing?
   a. 53,000
   b. 56,000
   c. 45,000
   d. 43,000

PROB. 11-10 (AICPA)

A company has 500 units production per day and 2,000 units are in process at any time. What is the throughput time?

a. ½ day
b. ¼ day
c. Two days
d. Four days

PROB. 11-11 (AICPA)

A company has an annual carrying cost percentage of 30% and average work in process of P300,000. The management plans to use Just-In-Time production system to double the velocity of work in process without changing total annual output. What would be the savings in annual carrying costs?

a. 90,000
b. 45,000
c. 150,000
d. 180,000

PROB. 11-12 (AICPA)

In a company where Step #1 in a production line processes each unit and sends it to await Step #2, and 500 units are waiting between Steps #1 and #2, how many defective units might Step #1 produce before the problem is detected in Step #2?

a. 500 units
b. Unlimited number
c. 250 units
d. 1,000 units

PROB. 11-13 (AICPA)

Atlas Co. has 10 work stations where work in process is held, 100 average units in work in process per station, an average cost of a unit in work in process of P75, and annual inventory carrying cost of 20%. If Atlas plans a 50% reduction in work in process levels, what would be the expected annual savings in carrying costs?

a. 37,500
b. 15,000
c. 30,000
d. 7,500

PROB. 11-14 (AICPA)

Boulevard Co. has an average peso loss per defective unit of P25, a planned reduction in work in process levels of 50%, and an average number of units in

work-in-process per station of 100. Assume that the total number of instances in which some work station goes out of control limits and produces defects is expected to be 500 annually and that in half those instances the out-of-control condition is not discovered immediately and enters 10% of the units produced. What is the expected annual saving in cost of defective units?

a. 1,250
b. 31,250
c. 6,250
d. 125

PROB. 11-15 (AICPA)

Cheeta Co. has materials cost in the June 1 Raw and In Process (RIP) of P10,000 materials received during the month of June of P205,000 and materials cost in the June 30 Raw and In Process (RIP) of P12,500. What would be the amount to be backflushed from RIP to Finished Goods at the end of June?

a. 215,000
b. 202,500
c. 207,500
d. 217,500

PROB. 11-16 (Adapted)

The Backflushers Manufacturing Corp. uses a Raw and In Process inventory account and expenses all conversion costs to the cost of goods sold account. At the end each month, all inventories are counted, their conversion cost components are estimated and inventory account balances are adjusted accordingly. Raw material cost is backflushed from RIP to finished goods. The following information is for the month of May:

Raw and In Process inventory account, May 1, including P500 of conversion cost	P 5,000
Raw materials received during May (50% down, balance in four installments)	100,000
Raw and In Process inventory account, May 31, including P650 of estimated conversion cost	5,250

What is the amount to be backflushed from RIP to finished goods?

a. 90,900
b. 99,900
c. 104,500
d. 109,100

PROB. 11-17 (Adapted)

The Backflushers Manufacturing Corp. uses a Raw and In Process inventory account and expenses all conversion costs to the cost of goods sold account. At the end each month, all inventories are counted, their conversion cost components are estimated and inventory account balances are adjusted accordingly. Raw material cost is backflushed from RIP to finished goods. The following information is for the month of May:

Raw and In Process inventory account, May 1, including P500 of conversion cost	P 5,000
Finished goods inventory account, May 1, including P3,250 of conversion cost	11,250
Raw materials received during May (50% down, balance in four installments)	100,000
Raw and In Process inventory account, May 31, including P650 of estimated conversion cost	5,250
Finished goods inventory account, May 31, including P2,500 conversion cost estimate	7,500

a. What is the amount to be backflushed from RIP to cost of goods sold?

a. 107,900
b. 102,900
c. 112,900
d. 86,900

b. What is the balance of cost of goods sold after adjustment?

a. 102,000
b. 102,300
c. 103,500
d. 103,800

PROB. 11-18 (Adapted)

The Cleaners Manufacturing Corp. uses a Raw and In Process (RIP) inventory account and expensed all conversion costs to the cost of goods sold account. At the end of each month, all inventories are counted, their conversion cost components are estimated and inventory account balances are adjusted accordingly. Raw material cost is backflushed from RIP to finished goods. The following information is for May:

Raw and In Process, May 1	38,700
Raw and In Process, May 31	41,900
Raw materials purchased	680,000
Conversion costs incurred	4,800
Conversion costs allocated	5,300
Finished goods, May 1	12,000
Finished goods, May 31	10,000

a. What is the calculated material cost to be backflushed from RIP to cost of goods sold?
   a. 718,700
   b. 688,800
   c. 678,800
   d. 676,800

b. What is the amount of conversion costs to be backflushed to cost of goods sold?
   a. 10,100
   b. 5,300
   c. 4,800
   d. 500

PROB. 11-19 (Author)

An entity is employing backflush costing in connection with just-in-time production process. The production data for the year is provided below:

- The entity acquired direct materials during the year at a cost of P100,000
- The entity reported direct labor cost of P200,000.
- The actual factory overhead incurred during the year amounted to P170,000.
- The standard factory overhead application rate is 75% of direct labor cost.
- The ending finished goods inventory is reported at P120,000.

What is the cost of goods sold to be reported by the entity under backflush costing?

a. 470,000
b. 350,000
c. 330,000
d. 300,000

PROB. 11 -20 (Author)

A company has a cycle of 3 days, uses a Raw and In Process Account (RIP) and charges all conversion costs to cost of goods sold. At the end of each month, all inventories are counted, their conversion costs components are estimated, and inventory account balances are adjusted. Raw material cost is backflushed from Raw and in Process (RIP) Account to finished goods. The following information is provided for the month of June.

Beginning balance, Raw and In Process account, including P1,000 of conversion cost	P 5,000
Beginning balance, Finished goods account, including P6,000 of conversion cost	10,000
Raw materials received on credit	400,000
Direct labor cost 300,000; Factory overhead 500,000	800,000
Ending balance, Raw and In Process inventory per physical count, including P7,000 conversion cost	20,000
Ending balance, Finished goods inventory per physical count, including P4,000 conversion cost	6,000

a. What is the amount of conversion cost in units sold in June?
   a. 802,000
   b. 796,000
   c. 794,000
   d. 800,000

b. What is the amount of direct materials backflushed from RIP to finished goods?
   a. 391,000
   b. 404,000
   c. 387,000
   d. 395,000

c. What is the amount of direct materials backflushed from finished goods to cost of goods sold?
   a. 395,000
   b. 400,000
   c. 393,000
   d. 389,000

ANSWERS – Theory of Accounts

TOA 11-1 *Suggested answer (a) Activity-based costing*

An activity-based costing system identifies the causal relationship between incurrence of costs and activities, determines the driver for each activity, and applies costs to products or services on the basis of resources (drivers) consumed.

TOA 11-2 *Suggested answer (a)Activities that causes costs to increase as the activity increases.*

A cost driver is a measure of activity, such as direct labor hours, machine hours, beds occupied, computer time used, flight hours, etc., that is causal factor in the incurrence of cost to an entity. It is a basis used to assign costs to cost objects.

TOA 11-3 *Suggested answer (a) resource driver*

The name resources driver is new, but the idea is not. For example, most traditional accounting system allocate some plant-wide costs to departments based on each department's allocation bases like the number of employees or square footage occupied. If an ABC system allocates the cost of a resource to several activities based on the square footage or number of employees devoted to each activity, then square footage and the number of employees are called resource drivers.

TOA 11-4 *Suggested answer (b) activity driver*

An activity driver is a base used to allocate the cost of an activity to products, customers, or other final cost objects. The word final refers to the last step in cost allocation. The nature and variety of activity drivers is what distinguishes ABC from traditional costing.

TOA 11-5 *Suggested answer (b) Multiple cause and effect relationships*

Activity-based costing seeks multiple cost drivers to explain the behavior of cost. The technique recognizes that there is no single independent variable to explain how a cost behaves. Breaking down costs into lower levels of

aggregation also helps to identify the factors that are relevant in explaining cost, and to exclude other factors.

TOA 11-6 *Suggested answer (a) Have a cause and effect relationship with the cost items in the cost pool.*

A cost allocation base is the common denominator for systematically correlating indirect costs and a cost object. The cost driver of the indirect costs is ordinarily the allocation base. In a homogeneous cost pool, all costs should have the same or a similar cause-and-effect relationship with the cause allocation base.

TOA 11-7 *Suggested answer (d) Increase, Increase*

In an activity-based cost system, cost assignment is more precise than in traditional cost system, because activities rather than functions or departments are defined as cost objects. This structure permits assignment to more cost pools and the identification of a driver specifically related to each.. A driver is a factor that causes a change in a cost. Thus an activity-based cost system uses more cost pools and cost assignment bases than a traditional system.

TOA 11-8 *Suggested answer (d) Plant level*

A difficulty in applying activity-based costing is that, whereas the first three levels of activities pertain to specific products or services, plant level activities do not. Thus, plant level costs are not accurately assignable to products. The theoretically sound solution may be to treat these costs as period costs, in order to avoid distorting of costs.

TOA 11-9 *Suggested answer (a) Substantially greater unit costs for low-volume products than is reported by traditional product costing.*

Activity based costing differs from traditional costing because it uses multiple allocation bases and therefore allocates overhead more accurately. The result is that activity based costing often charges low-volume products with more overhead than a traditional costing system.

TOA 11-10 *Suggested answer (b) Measuring income and assets for external reporting*

Cost allocation is the process of assigning and reassigning costs to cost objects. It is used for those costs that cannot be directly associated with a specific cost object. Cost allocation is often used for purposes of measuring income and assets for external reporting purposes. It is less meaningful for internal purposes because responsibility accounting systems emphasizes controllability, a process often ignored in cost allocation.

TOA 11-11 *Suggested answer (b) Activity-based costing is more likely to result in major differences from traditional costing systems, if the firm manufactures only one product rather than multiple products.*

Activity-based costing determines the activities that will serve as cost objects and then accumulates a cost pool for each activity using the appropriate activity base (cost driver). Therefore, if there is only one product, the allocation of costs to the product is insignificant. All of the cost is assigned to the one product; the particular method used to allocate the costs does not matter.

TOA 11-12 *Suggested answer (c) Employee benefits expense*

Employee benefits expense provides no clear relationship to the manufacturing operations portion of the company. At least the other allocation bases have some relationship to the manufacturing process.

TOA 11- 13 *Suggested answer (c) the use of information obtained from ABC to make improvements in the firm*

Activity-based management is a detailed analysis of activities and expenses created by those activities used as a basis for controlling and improving efficiency or the use of information obtained from activity-based costing to make improvement in a firm.

TOA 11-14 *Suggested answer (c) No, Yes*

An ABC system determines activities associated with the incurrence of costs and then accumulates a cost pools for each activity. It identifies the driver/s used to trace those costs to such cost object as products or services. A driver is a factor that causes a change in a cost. Activities that do not add value are identified and eliminated to the extent possible. However, all drivers cannot be eliminated.

TOA 11-15 *Suggested answer (d) Raw materials storage activity*

ABC assign costs more precisely than traditional cost system because cost pools are accumulated for activities rather than functions or departments. This structure permits assignment to more cost pools and the identification of the driver/s used to reassign costs to cost objects. Analysis by activity also provides for better cost control, because of identification of nonvalue activities. For example, raw materials storage may be greatly reduced or eliminated in a JIT system without affecting customer value.

TOA 11-16 *Suggested answer (d) Only one product is manufactured.*

Allocation of overhead on the basis if the number of units produced is usually not appropriate. Costs should be allocated on the basis of some plausible relationship between the cost object and the incurrence of cost, preferably cause and effect. Overhead costs may be incurred regardless of the level of production. When multiple products are involved, the number of units of production may bear no relationship to the incurrence of the allocated cost. If overhead is correlated with the machine hours but different products require different quantities of that input, the result may be an illogical allocation. However, if a firm manufactures only one product, this allocation method may be acceptable because all costs are to be charged to the single product.

TOA 11-17 *Suggested answer (d) The manufactured products differ in the resources consumed from the individual departments in the plant.*

Factory overhead is usually assigned to products based on a predetermined rate or rates. The activity base for overhead allocation should have a high correlation with the incurrence of overhead. Given only one cost driver, one

overhead application rate is sufficient. If products differ in the resources consumed in individual departments, multiple rates are preferable.

TOA 11-18 *Suggested answer (b) Various products are manufactured that do not pass through the same departments or use the same manufacturing techniques.*

Multiple rates are appropriate when a process differs substantially among departments or when products do not go through all departments or all processes. The trend in cost accounting is toward activity-based costing, which divides production into numerous activities and attempts to identify the driver/s most relevant to each. A driver is a factor that causes changes in a cost. Thus, activity-based costing emphasizes cost assignment based on trading rather than allocation. The result is a more accurate assignment of costs.

TOA 11-19 *Suggested answer (c) Preferring plant-wide application rates that are applied to machine hours rather than incurring the cost of detailed allocations.*

In activity-based costing system, companies are finding new ways of allocating indirect factory overhead. For one, plant-wide application rates are being used less often because a closer matching of costs with cost drivers provides more refined data. Instead of a single cost goal for a process, a department, or even an entire plant, an indirect cost pool is established for each identified activity. The related cost driver, the factor that changes the cost of the activity, is also identified.

TOA 11-20 *Suggested answer (b) Number of shipments*

The number of shipments is an appropriate cost driver. A cause and effect relationship may exist between the number of shipments and distribution costs.

TOA 11-21 *Suggested answer (a) Just in time inventory system*

TOA 11-22 *Suggested answer (d) Both (a) and (b)*

A primary objective of JIT is to eliminate all manufacturing inventories by using a "pull approach". This approach begins with the customer placing an order with the company, which starts the process of pulling the product through the manufacturing process.

TOA 11-23 *Suggested answer (d) high quality and balanced work loads*

Just in time is a philosophy centered on the reduction of costs through elimination of inventory. Elimination of inventories eliminates storage and carrying costs, however, it also eliminates the cushion against production errors and imbalances that inventories provide. As a result, high quality and balanced work loads are required in a JIT system to avoid costly shutdowns and customer ill will. Because of the need for quality and balanced production, JIT has come to be closely identified with efforts to eliminate waste in all its forms, and thus it is an important part of many total quality management (TQM) efforts.

TOA 11-24 *Suggested answer (a) backflush production*

The most visible aspect of JIT is the effort to reduce inventories of work in process and raw materials. Most writing on JIT concentrate on this one aspect, which is called stockless production, lean production, or zero inventory production. While backflush costing is an abbreviated approach to accounting for the flow of manufacturing costs, which is applicable to mature JIT system in which velocity is too high that traditional accounting is impractical.

TOA 11-25 *Suggested answer (c) Backflush costing*

Backflush costing is an abbreviated approach to accounting for the flow of manufacturing costs. It is applicable to mature just-in-time system in which velocity is so high that traditional accounting is impractical. It is noted for its lack of detailed tracking of the cost of work in process. The system is best suited to companies that maintain low inventories because costs then flow directly to cost of goods sold.

TOA 11-26 *Suggested answer (a) Backflush costing*

TOA 11-27 *Suggested answer* (d) Cost of goods sold

In backflush costing, direct labor and overhead costs are expensed to the cost of goods sold account. The estimated conversion cost components of the RIP and finished goods inventory account balances are adjusted at the end of each month, with the offsetting entry representing a correction of ***cost of goods sold****. If conversion cost increased during the month, cost of goods sold is credited; however, when conversion cost decreased, cost of goods sold is debited.*

SOLUTIONS - Problems

PROB. 11-1 *Suggested answer (c) 4.00 per step*

Overhead using direct labor hours (60 x 200)	12,000
Overhead using machine hours (12,000 – 4,000)	8,000
Ratio of overhead to machine steps (8,000/2,000)	4.00/step

Given the ratio of overhead to direct labor hours of P60, which is higher by P4,000 than machine steps as the cost driver, the resulting difference of P8,000 is the overhead cost using machine steps. Therefore, the ratio of overhead to machine steps is P4.00 per step.

PROB. 11-2 *Suggested answer* (d) P525.50 higher than cost.

Traditional Cost System (based on DHL) (P 27,500 x 14.5%)		P 3,987.50
Activity-Based Costing System		
Incoming material inspection activity (11.50 x 12 types)	P 138.00	
In process inspection activity (14 x 17,500 units)	2,450.00	
Product certification activity (77 x 25 orders)	1,925.00	4,513.00
Higher than cost using the traditional Cost system		P 525.50

The traditional costing systems are characterized by their exclusive use of unit of level measures as bases for allocating overhead to output. On the other hand, Activity-Based Costing system identifies the causal relationship between the incurrence of cost and activities, determines the drivers of the activities, establishes cost pools related to drivers and activities, and assigns costs to ultimate cost object on the basis of the resources or drivers on the activities.

PROB. 11-3 *Suggested answer* (d) P6.30

Material handling cost per part (720,000/6,000,000)	P 0.12
Cost per setup (315,000/750)	420.00
Machining cost per hour (540,000/30,000)	18.00
Quality control per batch (225,000/500)	450.00

Material handling activity (5 parts x 20,000 x 0.12)	P12,000
Setup cost activity (20,000/5,000 x 2 setups x 420)	3,360
Machining activity (20,000/5,000 x 80 mach. hrs x 18)	5,760
Quality control activity (20,000/5,000 x 450)	1,800
Total	P22,920

Prime cost per unit	P 5.15
Overhead per unit (22,920/20,000 units)	1.15
Total unit cost	P 6.30

As compared to the traditional costing system, Activity-Based Costing system represents a more thorough application of cost tracing. It recognizes that many other costs are in fact traceable, not to units of output, but to the activities required to produce output. In addition, since, the question being asked is the cost per unit of the product, thus we considered the three elements of costs (direct materials, direct labor, and overhead).

PROB. 11-4 *Suggested answer (c) 5,000*

Traditional costing (160,000/40,000 x 400)		16,000
Activity-based costing:		
Machine hours (120,000/20,000 x 500)	3,000	
Set-ups (40,000/100 x 20)	8,000	11,000
Difference (cross subsidy)		5,000

In traditional costing system, a single pool of costs (overhead) is accumulated for a given organization unit, and these costs are then assigned using an allocative rather than a tracing procedure. The effect is an averaging of costs that may result in significant inaccuracy when products or service units do not use similar amounts of resources. Activity-based costing attempts to improve costing by assigning cost to activities rather than to an organizational unit. Accordingly, activity-based costing requires identification of the activities that consume resources and that are subject to demands by ultimate cost objects.

PROB. 11-5 *Suggested answer* (a) P4.80 P10.00

Traditional Cost System (based on direct labor hours) (P60,000/25,000 x 2 direct labor hours)	P 4.80
Activity-Based Costing System (P1,000/100)	P 10.00

Again, the traditional costing systems are characterized by their exclusive use of unit of level measures as bases for allocating overhead to output; while ABC recognizes cost traceable to the activities required to produce output. In this case, the traditional costing system allocates setup costs based on direct labor hours, where two direct labor hours are needed to produce one unit; while ABC traces costs by spreading the costs per batch over the units in batch.

PROB. 11-6

a) *Suggested answer* (a) P200.00 P80.00 P125.00

	Setups	Machining	Inspections
Overhead rate:			
P100,000/500	P 200.00		
P400,000/5,000		P 80.00	
P50,000/400			P 125.00

If in traditional costing system, a single unit level basis of allocation is used to allocate overhead costs to products; ABC recognizes that to have accurate and meaningful cost data, more than one basis of allocating activity costs to product is needed. In selecting the basis, ABC seeks to identify the cost drivers that measure the activities performed on the products. Since this case, there were two products produced, the measurement of activities should be the total for the two products.

b) *Suggested answer* (d) P272,500 P277,500

	Side A	Side B
Setups (200 x 100)	P 20,000	
(200 x 400)		P 80,000
Machining (80 x 3,000)	240,000	
(80 x 2,000)		160,000
Inspections (125 x 100)	12,500	
(125 x 300)		37,500
Total	P 272,500	P 277,500

After determining the overhead rate. to compute the allocated overhead cost, overhead rate will be multiplied by the number of activities for each product.

c) *Suggested answer* (d) P20.00 P25.00

	Side A	Side B
Overhead cost per unit		
(P272,500/13,625 units)	P 20.00	
(P277,500/11,100 units)		P 25.00

PROB. 11-7

a. *Suggested answer (a) 1,000*

Allocated cost based on direct labor hours (50,000 x 200/400)	25,000
Divide by units produced (ordinary glass)	25
Cost per unit (ordinary glass)	1,000

Allocating overhead based on the direct labor hours is the traditional method of allocating overhead. This method is characterized by their exclusive use of unit level measures as bases for allocating overhead to output.

b. *Suggested answer (b) 500*

Allocated cost based on material moves (50,000 x 5/20)	12,500
Divide by units produced (ordinary glass)	25
Cost per unit (ordinary glass)	500

Activity-based costing attempts to improve costing by assigning cost to activities rather than to an organizational unit. Activities, such as production

scheduling, supervising and setting up, must be identified for cost accumulation. Cost drivers, such as the number of production runs, and the number of set-ups or moves, must be defined for allocating the accumulated overheads to products benefiting from the activities. These pools are the cost centers, and the cost drivers from the bases of overhead recovery rates.

PROB. 11-8 *Suggested answer (b) P2.40*

Total overhead [P600 x (8 +2)]		P 6,000
Cost per machine hour [P6,000/(5 x 1,000)]		P 1.20
	X	Z
Traditional cost system		
(P1.20 x 2 machine hours)	P 2.40	
(P1.20 x 3 machine hours)		P 3.60
Activity-based cost system		
(P600 x 8/1,000 units)	4.80	
(P600 x 2/1,000 units)		1.20
Cross-subsidy per unit (Under) Overcost	(P 2.40)	P 2.40

Peanut butter costing is an inaccurate averaging or spreading of costs over products or service units that use different amounts of resources results in product cost cross subsidization. This term describes the condition in which the miscosting of one product causes the miscosting of other product. Thus, the unit amount by which machine hour based assignment overcosts Z and at the same time undercosts X (cross-subsidy) is P2.40.

PROB. 11-9

a. Suggested answer (a) 70,000

Traditional costing [7,000 hrs x (1,000,000/10,000 hrs)]	70,000

b. Suggested answer (a) 53,000

ABC [(10,000 x 2) + (3,000 x 6) + (300 x 50)]	53,000

PROB. 11-10 *Suggested answer* (d) 4 days

Throughput time (2,000/500)	4 days

In production, there is an important and direct relationship between the size of work in process and the speed of production. Throughput time is inversely related to velocity and may be computed by dividing units in process by units produced per day.

PROB. 11-11 *Suggested answer* (b) P45,000

Savings in annual carrying costs (30% x ½ x P300,000)	P 45,000

Velocity is the speed in which units or tasks are processed in a system. A strategic benefit of increased velocity is the reduced time needed to fill production orders. And because work in process is a costly asset that must be financed and maintained just as any other asset producing savings in the carrying cost of inventory. Where velocity is doubled, the annual carrying cost percentage is reduced by one-half.

PROB. 11-12 *Suggested answer* (a) 500 units

At individual work stations in a production line, the impact of work in process reduction is simple, fewer units will be waiting at, or moving to, each station; and this can have an important impact on production losses. In this case, where 500 units were waiting between Step #1 and Step #2, the defective units Step #1 might produce before the problem is discovered is the units Step #1 sends; possibly less, if the problem at Step #1 is discovered or if the defect enters only some of the units produced. The worst outcome is ***500 units****, which is the size of work in process at that work station.*

PROB. 11-13 *Suggested answer* (d) P7,500

Average work in process (P75 x 10 x 100)	P 75,000
Multiply by annual carrying cost	20%
Total	15,000
Multiply by reduction in work in process	50%
Expected annual savings in carrying costs	P 7,500

Again, because work in process is a costly asset that must be financed and maintained just as any other assets, the obvious benefit of a work in process reduction is that total investment is reduced, producing savings in inventory carrying costs. In addition to the effect on inventory carrying costs, a more important result of a work in process reduction is its effect on production losses.

PROB. 11-14 *Suggested answer* (b) P31,250

Total average defective units (100 x 10%) x (½ x 500)	2,500 units
Multiply by reduction in work in process level	50%
Total savings in defective units	1,250 units
Multiply by average peso loss per defective unit	25
Expected annual savings in cost of defective units	P 31,250

Again, in addition to the effect on inventory carrying costs, a more important result of a work in process reduction is its effect on production losses. At individual work stations in a production line, the worst outcome on defective units is the size of work in process in that work station; possibly less, if the problem at a work station is discovered in some other way or if the defects enters only some of the units produced.

PROB. 11-15 *Suggested answer* (b) P202,500

Raw and In Process inventory, June 1	P 10,000
Add Materials received during June	205,000
Total	215,000
Less Raw and In Process inventory, June 30	12,500
Amount to be backflushed	P 202,500

The accounting for materials inventory, as well as work in process, can be altered by backflush costing.In a successful Just-In-Time application where backflush costing is used, materials and work in process are combined in a single account called Raw and In Process inventory. The backflush calculation uses end of period estimates of actual material and conversion cost components of all unfinished work, including any unprocessed raw

materials. Raw material cost is backflushed from RIP to Finished Goods and from Finished Goods to Cost of Goods based on the monthly physical counts.

PROB. 11-16 *Suggested answer* (b) P99,900

Raw and In Process inventory, May 1, net of conversion (P5,000 – 500)	P 4,500
Add Materials received during June	100,000
Total	104,500
Less Raw and In Process inventory, June 30, net of conversion (P5,250 – 650)	4,600
Amount to be backflushed from RIP to FG	P 99,900

Since in backflush costing, materials and work in process are combined in a single account called RIP, for direct materials used no journal entry is needed, and conversion costs are expensed to the cost of goods sold. Thus, the conversion cost should be deducted from the amount of RIP to be backflushed to finished goods.

PROB. 11-17

a. *Suggested answer* (b) P102,900

Raw and In Process inventory, May 1, net of conversion (P5,000 – 500)	P 4,500
Add Materials received during June	100,000
Total	104,500
Less Raw and In Process inventory, June 30, net of conversion (P5,250 – 650)	4,600
Amount to be backflushed from RIP to FG	P 99,900
Finished goods inventory, May 1, net of conversion (P11,250 – 3,250)	P 8,000
Add Materials backflushed to finished goods	99,900
Total	107,900
Less Finished goods inventory, May 31, net of conversion (P7,500 – 2,500)	5,000
Amount to be backflushed from FG to CGS	102,900

As shown earlier, backflushing is from RIP to finished goods, because there is no finished goods inventory, but it should be pointed out that in this case, backflushing is made directly to cost of goods sold. Further, if there is finished goods inventory account, the amount to be shown as backflushed is up to cost of goods sold. Note in the above computations, the amount added to the finished goods inventory is the amount backflushed from RIP to finished goods.

b. *Suggested answer* (c) P103,500

Amount backflushed from FG to CGS		P 102,900
Add net decrease in conversion cost:		
Increase (from RIP to FG)		
(500 – 650)	150	
Decrease (from FG to CGS)		
(3,250 – 2,500)	750	600
Cost of goods sold balance		P 103,500

Again, the estimated conversion cost components of the RIP and finished goods inventory account balances are adjusted at the end of each month, with the offsetting entry representing a correction of cost of goods sold. If conversion cost increased during the month, cost of goods sold is credited; however, when conversion cost decreased, cost of goods sold is debited.

PROB. 11-18

a. *Suggested answer (c) 678,800*

Raw and in process, May 1	38,700
Add raw materials purchased	680,000
Total	718,700
Less raw and in process, May 31	41,900
Amount to be backflushed from RIP to finished goods	676,800
Finished goods, May 1	12,000
Materials backflushed from raw and in process	676,800
Total	688,800
Less finished goods, May 31	10,000
Amount backflushed to cost of goods sold	678,800

Backflush costing determines some or all elements of cost of output only after production is completed. The cost of completed work is subtracted from the balance of the work in process account, or equivalent combined account, in a step called post-deduction or post-manufacturing deduction.

b. *Suggested answer (b) 5,300*

The backflush calculation uses end of period estimates of actual materials and conversion cost components of all unfinished work. The cost estimates are made after a physical inventory count, which is usually done monthly or weekly. Estimates of conversion cost amounts can be derived by first estimating the conversion cost of a finished unit, and then assigning a part of that to the partly finished units on hand. Thus, the conversion costs to be backflushed to cost of goods sold shall be the conversion allocated in the amount of P5,300.

PROB. 11 -19 *Suggested answer (c) 330,000*

Direct materials purchased/used during the year	100,000
Direct labor costs during the year	200,000
Standard factory overhead (200,000 x 75%)	150,000
Total	450,000
Less finished goods inventory ending	120,000
Cost of goods sold under backflush costing	330,000

PROB. 11 - 20

a. *Suggested answer (b) 796,000*

Conversion costs:		
Beginning RIP account	1,000	
Beginning finished goods account	6,000	
During the year	800,000	807,000
Less Conversion costs:		
Ending RIP account	7,000	
Ending finished goods account	4,000	11,000
Conversion costs on cost of goods sold		796,000

b. Suggested answer(a) 391,000

Raw materials in beginning RIP account	4,000	
Raw materials in credit	400,000	404,000
Less Raw materials in RIP account		13,000
Raw materials backflushed to finished goods		391,000

c. Suggested answer (c) 393,000

Raw materials in beginning finished goods	4,000	
Raw materials backflushed to finished goods	391,000	395,000
Less Raw materials in ending finished goods		2,000
Raw materials backflushed to cost of goods sold		393,000

Chapter 12

Revenue from Contracts with Customers

The Board of Accountancy, through its mandate, includes IFRS 15, *Revenue from Contracts with Customers*, in the CPA Licensure Examination – Advanced Financial Accounting and Reporting (AFAR) effective May 2019 examination. In line with this, the author focused the discussion of this topic as specified in that syllabus of AFAR.

IFRS 15 specifies how and when revenue will be recognized by providing a single, principles based five-step model to be applied to all contracts with customers. This standard supersedes the following standards and interpretations, such as: IAS 11 - Construction Contracts; IAS 18 - Revenue; IFRIC 13 - Customer Loyalty Programmes; IFRIC 15 – Agreements for the Construction of Real Estate; IFRIC 18 – Transfers of Assets from Customers; SIC 31 – Revenue – Barter Transactions Involving Advertising Services.

ACCOUNTING REQUIREMENTS FOR REVENUE

The Five-Step Model Framework

The core principle of PFRS/IFRS 15 is that an entity will recognize revenue to depict the transfer of promised goods or services to customer in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This core principle is delivered in a five-step model framework.

Step 1: Identify the Contract with Customer

A contract with a customer is within the scope of IFRS 15, when all of the following criteria are met:

- The contract has been approved by the parties to the contract.
- The right of each party in relation to the goods or services to be transferred can be identified.

- The terms and conditions of payment for the goods or services to be transferred can be identified.
- The contract has commercial substance.
- The collection of consideration to which the entity is entitled to in exchange for the goods or services is probable.

Step 2: Identify the performance obligations in the contract

At the inception of the contract, the entity will assess the goods or services that have been promised to the customer and identify as a performance obligation.

- A good or service (or bundle of goods or services) that is *distinct*, or
- A series of distinct goods or services that are substantially the same and that have the *same pattern of transfer* to the customer.

A good or service is distinct if the customer can benefit from the goods or services on its own or in conjunction with other readily available resources; **and** the entity's promise to transfer the good or service to the customer is *separately identifiable* from other promises in the contract.

A series of distinct goods or services has the same pattern of transfer to the customer if each distinct good or service to transfer consecutively to the customer would be a performance obligation that is satisfied over time; **and** the same method of measuring progress would be used to measure the entity's progress towards complete satisfaction of performance obligation to transfer each distinct good or service in the series to the customer.

Step 3: Determine the transaction price

The transaction price is the amount of consideration an entity expects to be entitled to in exchange for transferring promised goods or services to a customer. In making this determination, an entity will consider past customary business practices and the terms of the contract.

In case a contract contains elements of variable consideration (e.g., results of discount, rebates, refunds, credits, price concessions, incentives, penalties and other similar items), the entity will estimate the amount to which it will be entitled under the contract. Specifically, variable consideration is only

included in the transaction price to the extent that it is highly probable that its inclusion will not result in a significant reversal of revenue in the future when the uncertainty has been substantially resolved.

Step 4: Allocate the transaction price to the performance obligations in the contracts

Where a contract has multiple performance obligations, an entity shall allocate the transaction price to the performance obligations in the contract using their relative stand-alone selling prices. If the stand-alone selling price is not directly observable, an entity will need to estimate it. IFRS 15 suggests various methods that may be used, including:

- Adjusted market assessment approach
- Expected cost plus a margin approach; or
- Residual approach (only permissible in limited circumstances)

Any overall discount included in the transaction price is allocated between the performance obligations on a relative stand-alone selling price basis. In some circumstances, it may be appropriate to allocate the discount to some but not all of the performance obligations.

Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation

Revenue is recognized when it satisfies a performance obligation, that is when control is passed, either *over time* or at a *point in time*. Control is the ability to direct and to prevent others from directing the use of and obtain substantially all of the remaining benefits from the asset.

An entity recognizes revenue *over time* if one of the following criteria is met:

- The customer simultaneously receives and consumes the benefit provided by the entity as the entity performs.
- The entity's performance creates or enhances an asset that the customer controls as the asset is created or enhanced; or
- The entity's performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for the performance completed to date.

An entity may recognize revenue at a *point in time* at which control passes include, but not limited to:

- The entity has a present right to payment for the asset.
- The customer has legal title to the asset.
- The entity has transferred physical possession of the asset.
- The customer has significant risks and rewards related to the ownership of the asset; and
- The customer has accepted the asset.

OTHER REVENUE RECOGNITION ISSUES

As provided by the Board of Accountancy in the Revised CPA Licensure Examination Syllabi effective May 2019 examination, the following revenue recognition issues were included under Revenue Recognition (PFRS 15).

SALE WITH A RIGHT OF RETURN

IFRS 15, Revenue from Contracts with Customers, provides that when an entity transfers control of a product to a customer, a right to return the product is also granted and to receive any combination of the following:

- A full or partial refund of any considerations paid;
- A credit that can be applied against amounts owed, or that will be owed, to the entity; and
- Another product in exchange.

To account for the transfer of products with a right of return and for services that are provided subject to a refund, an entity shall initially recognize all of the following:

1. Revenue
2. Refund liability
3. Asset

Revenue

Under the IFRS 15, when an entity makes a sale with a right of return, it recognizes revenue at the amount to which it expects to be entitled by applying

the variable consideration and constraint guidance set out in Step #3 (Determine the Transaction Price) of the revenue model framework. Simply stated, revenue is measured at the gross transaction price less the expected level of returns calculated using the guidance on estimating variable consideration and the constraint. The customer's right to return a product may affect the amount of revenue, which is the transaction price, because revenue may only be recognized for products that are not expected to be returned. Therefore, no amount of revenue for the product expected to be returned shall be recognized. At the end of each reporting period, an entity shall update its assessment of amount for which it expects to be entitled and make a corresponding change to the transaction price and in the amount of revenue recognized.

Refund Liability

The standard provides that for any amounts received (or receivable) for which an entity does not expect to be entitled, an entity shall not recognize revenue when it transfers products to customers but shall recognize those amounts received (or receivable) as a refund liability. In other words, a refund liability is recognized whenever an entity receives considerations from a customer and expects to refund some or all of that consideration to the said customer. A refund liability is measured at the expected level of returns, that is, the amount of consideration received or to be received to which an entity does not expect to be entitled (e.g., the amount not included in the transaction price). At the end of each reporting period, an entity shall update the measurement of the refund liability for changes in expectation about the amounts of refund. Any corresponding adjustments are recognized as revenue (or reductions of revenue).

Asset

An entity also recognizes an asset (and corresponding adjustment to cost of sales) for its right to recover products from customers on settling the refund liability. It is initially measured by reference to the former carrying amount of the product (e.g., inventory) less any expected costs to recover those products, including potential decreases in the value to the entity of returned products. The costs expected to be incurred when the products are returned should be recognized at the date when control is transferred to the customer as a reduction from the carrying amount of the asset expected to be recovered. At the end of each reporting period, an entity shall update the measurement of the asset for changes

in expectations about product to be returned. The asset should be presented separately from the refund liability.

WARRANTIES

It is common for an entity to provide a warranty in connection with the sale of goods or services. The nature of a warranty can vary significantly as some warrants provide customers with *assurance* that the related product will function as the parties intended because it complies with agreed-upon specification. Other warranties provide the customer with a service *in addition to the assurance* that the product complies with agreed-upon specification.

Service Type Warranty

It is a warranty that provides something additional to the mere assurance that the product will work as specified in the contract. This type of warranty arises when:

- A customer has the option to purchase it separately;
- Provides services beyond assuring that the product complies with promised specification.

If a customer has the option to purchase a warranty separately, that the warranty is priced or negotiated separately, the warranty is a distinct service because the entity has promised to provide the service to the customer *in addition* to the product that has the functionality described in the contract. In which case, an entity shall account for the promised warranty as a separate performance obligation, as such, IFRS 15 requires a portion of the transaction price be allocated to the warranty to depict the amount that the vendor expects to receive for providing the service, which is usually based on its estimated stand-alone selling price. Revenue is recognized as the warranty obligation is fulfilled, which is likely over the term of the contract.

Assurance Type Warranty

It is a warranty that promises the customer that the delivered product will work as specified in the contract. In the event that the product does not perform as expected, the entity promises further to repair or replace the delivered good or service. This type of warranty is not a separate performance obligation; thus, no

amount of transaction price is allocated to it. To account for an assurance type warranty, the entity should estimate and accrue a warranty liability when the promised good or service is delivered to the customer.

Note that if a customer does not have the option to purchase a warranty separately and the warranty does not provide additional services, then, it is an assurance type warranty and shall be accounted for in accordance with IAS 37, Provisions, Contingent Liabilities and Contingent Assets.

Additional Service to the Customer

To assess whether a warranty provides a customer with service in addition to the assurance that the product complies with agreed-upon specification, an entity considers the following factors:

1. Whether the warranty is required by law
2. The length of the warranty coverage period
3. The nature of the task the entity promises to perform

If a warranty provides both an assurance type warranty, that is accounted under IAS 37, and a service type warranty, that is accounted under IFRS 15, but cannot be reasonably accounted separately, the entity shall account both warranties together as a single performance obligation. In which case, the transaction price is allocated to the combined warranty and revenue is recognized as the performance obligation is fulfilled.

PRINCIPAL VERSUS AGENT CONSIDERATION

When another party is involved in providing goods or services to a customer, an entity evaluates the nature of its promise to the customer by identifying each specified good or service promised to the customer in the contract and evaluating whether the entity obtains control of the specified good or service before it is transferred to the customer. An entity identifies each specified good or service to be transferred to the customer and determines whether it is a principal or agent for each one. It is important to determine whether an entity is acting as a principal or as an agent, because it can significantly affect the amount and timing of revenue to be recognized.

Principal

An entity is a principal, if it controls the specified good or service that is promised to the customer before it is transferred to that customer. However, if the entity obtains legal title to that good only momentarily before legal title is transferred to a customer, that does not necessarily mean the entity had control of that specified good. When another party is involved in providing goods or services to a customer, an entity that is a principal obtains control of any one of the following:

1. A good or another asset from the other party that it then transfers to the customer.
2. A right to a service to be performed by the other party, which gives the entity the ability to direct that party to provide the service to the customer on the entity's behalf.
3. A good or service from the other party that it then combines with other goods or services in providing the specified good or service to the customer. In this case, the entity first obtains control of the inputs to the specified good or service, which includes good or service from other party and direct their use to create the combined output that is the specified good or service.

If the entity is a principal, it recognizes revenue on a gross amount of the consideration to which the entity expects to be entitled in exchange for the specified goods or services transferred. An entity that is a principal may satisfy a performance obligation by itself or may engage another party (e.g., subcontractor) to satisfy some or all of the performance obligation on its behalf. However, if another party assumes the entity's performance obligation so that the entity is no longer obliged to satisfy the performance obligation, then the entity is no longer acting as the principal and therefore does not recognize revenue for that performance obligation. Instead, the entity shall evaluate whether to recognize revenue for satisfying a performance obligation to obtain a contract for the other party (e.g., whether the entity is acting as an agent).

Agent

An entity is an agent if it does not control the specified good or service provided by another party before that good or service is transferred to the customer. Its performance obligation is to arrange for the provision of the specified good or service by another party from which that entity, as an agent, recognizes revenue in the amount of any fee or commission might be the net amount of consideration that the entity retains after paying the other party the consideration received from that exchange transaction.

NON-REFUNDABLE UP-FRONT FEES

In some contracts, an entity charges a customer a non-refundable up-front fee (e.g., joining fees in club membership, activation fees for the telecommunication contracts, set-up fees in some service contracts, and initial fees in some supply contracts) at or near contracts inception. The standard requires that an entity should assess whether the non-refundable up-front fee relates to the transfer of a promised good or service to a customer.

If the non-refundable up-front fee relates to specific good or service, the entity shall evaluate whether to account for the good or service as a separate performance obligation. If so, the entity shall recognize allocated consideration as revenue on that transfer in accordance with Step 4 of the Five-Step Model Framework (Allocate the transaction price to the performance obligation in the contract).

However, although a non-refundable up-front fee relate to an activity that an entity is required to undertake to fulfill the contract, that activity does not result in the transfer of a promised good or service to the customer. In which case, the non-refundable up-front fee is an advance payment for performance obligations to be satisfied in the future and is recognized as revenue when those future goods or services are provided. In some cases, where an entity grants a customer the option to renew the contract and that option provides the customer with a material rights, the revenue recognition period is extended beyond the initial contractual period.

An entity may charge a non-refundable fee in part as compensation for costs incurred in setting up a contract or other administrative tasks. If those set-up activities do not satisfy a performance obligation, as such do not depict the transfer of services to the customer, the entity shall disregard those activities (and related costs) when measuring progress to assess when to recognize revenue. If the costs incurred are not within the scope of another standard (e.g., IAS 2 *Inventories*, IAS 16 *Property, Plant and Equipment* or IAS 38 *Intangibles*), an entity shall recognize an asset only if those costs meet all the following criteria:

a. The costs relate directly to a contract or to an anticipated contract that the entity can specifically identify;
b. The costs generate or enhance resources of the entity that will be used in satisfying (or in continuing to satisfy) performance obligations in the future; and
c. The costs are expected to be recovered.

The entity shall assess whether the set-up costs should be capitalized.

REPURCHASE ARRANGEMENTS

A repurchase arrangement is a contract in which an entity sells and asset and also promises or has the option to repurchase the asset. Repurchase arrangements generally come in three forms, such as:

1. An entity's obligation to repurchase the asset (forward contract);
2. An entity's right to repurchase the asset (call option); and
3. An entity's obligation to repurchase the asset at the customer's request (put option).

Forward Contract or Call Option

If an entity has an obligation (a forward) or a right (a call option) to repurchase an asset, a customer does not have control of the asset because of customer's limited ability to direct the use of, and obtain the benefits from, the asset despite its physical possession. Consequently, the entity shall account for the contract as either:

- **Lease**, if the entity expects to repurchase the asset for less than its original sales price, unless the contract is part of a sale and leaseback transaction, in which case, the entity shall continue to recognize the asset and shall recognize a financial liability for any consideration received from the customer. The financial liability is accounted in accordance with IFRS 9 – Financial Instruments; or

- **Financing arrangement**, if the entity expects to repurchase the asset for an amount greater than or equal to the original sales price, in which case, the entity shall continue to recognize the asset and also a financial liability for any consideration received from the customer. Any difference between the amount of consideration received from the customer and amount paid to the customer is recognize as interest, if applicable, processing or holding cost.

When comparing the repurchase price with the selling price, the entity is considering the time value of money. If the option expires unexercised, the entity derecognizes the liability and the related asset and recognizes revenue.

Put Option

If a customer has a right to require the entity to repurchase the asset (put option) at a price lower than the original selling price, then at the inception of the contract, the entity assesses whether the customer has a significant economic incentive to exercise the right. In order to make this assessment, an entity considers the following factors:

1. The relationship of the repurchase price to the expected market value of the asset at the date of repurchase; and
2. The amount of time until the right expires.

If the customer has a significant economic incentive to exercise the put option, the entity shall account for the agreement as a lease. However, if the customer does not have a significant economic incentive, the entity shall account for the agreement as the sale of a product with a right of return.

If the repurchase price of the asset is equal or greater than the original selling price and more than the expected market value of the asset, the contract is accounted for as a financing arrangement. In which case, if the option expires unexercised, the entity derecognizes the liability and the related asset and recognizes revenue at the date on which the option expired. Again, when comparing the repurchase price with the selling price, the entity considers the time value of money.

LICENSING

A license establishes a customer's rights to the intellectual property of another entity and that entity's obligation to provide those rights. IFRS 15 includes the application guidance for the recognition of revenue attributable to a distinct license of intellectual property. License of intellectual property may include, but not limited to, the following: Software and technology; Motion pictures, music and other forms of media entertainment; Franchises; Patents, trademarks and copyrights. In addition to

promise to grant license to customer, the entity may also promise to transfer other goods and services.

Distinct Versus Not Distinct

If the promise to grant a license is ***distinct*** from other promised goods or services in the contract, the promise to grant the license is a *separate performance obligation*, as such, the performance obligation shall be identified in accordance with Step 2 of the revenue model.

If the promise to grant a license is ***not distinct*** from other promised goods or services in the contract (e.g., a license that forms a component of a tangible good and that is integral to the functionality of the good, a license that the customer can benefit only in conjunction with a related service), an entity shall account for that promise to grant a license and those other promised goods or services together as a *single performance obligation.*

Accordingly, the entity shall determine whether the performance obligation, which includes the promised license, is satisfied over time or at a point in time by applying Step 5 of the revenue model - *Revenue recognition when (or as) the entity satisfies a performance obligation;* and by considering whether the nature of the entity's promise is to provide with either: a *right to access* the entity's intellectual property as it exists throughout the license period (*over time*); or a *right to use* the entity's intellectual property as it exists at the *point of time* at which the license is granted. The nature of the entity's promise in granting a license is a promise to provide a *right to access* the entity's intellectual property if all the following criteria are met:

- That the entity will undertake activities that significantly affect the intellectual property to which the customer has rights (e.g., those activities are expected to significantly change the form or functionality of the intellectual property; or the ability of the customer to obtain benefit from the intellectual property is substantially derived from, or dependent upon, those activities).
- The rights granted by the license directly expose the customer to any positive or negative effects of the entity's activities identified.
- Those activities do not result in the transfer of a good or service to the customer as those activities occur.

If the aforementioned criteria are met, the customer will simultaneously receive the benefit as the performance occurs. Accordingly, an entity shall account for that promise to grant a license as a performance obligation satisfied *over time*

using an appropriate method to measure its progress toward complete satisfaction of that performance obligation (e.g., output methods, input methods).

However, if those criteria are not met, the customer can direct the use of and obtain substantially all the remaining benefits at the *point in time* the license is granted to the customer. Accordingly, an entity shall account for that promise to provide a right to use the intellectual property as a performance obligation satisfied at a *point in time*. It should be noted that no revenue shall be recognized for a license that provides a right to use the entity's intellectual property before the customer is able to use and benefit from the license, that is before the start of the license period.

Sales-based or Usage-based Royalty

Although IFRS 15 includes general guidance on constraining estimates of variable consideration (e.g., discounts, rebates, refunds, credits, price concessions), that guidance does not apply to a sales- or usage-based royalty promised in exchange for a license of intellectual property. Instead, revenue from this exception (sales- or usage-based royalty) is recognized only when (or as) the later of the following occurs:

- When the subsequent sale or usage occurs; and
- The satisfaction (or partial satisfaction) of the performance obligation to which some or all of the sales- or usage-based royalty has been allocated.

The aforementioned requirement applies when the royalty relates only to a license of intellectual property; or a license of intellectual property is the predominant item to which the royalty relates (e.g., when the customer would ascribe significantly more value to the license than to the other goods or services to which the royalty relates). When this requirement is met, the corresponding revenue shall be recognized wholly subject to the above exception (sales- or usage-based royalty); otherwise subject to the general guidance on variable consideration. Note that an entity does not split a royalty into a portion that is subject to the exception and a portion that is subject to the general guidance on variable consideration, including the constraint.

BILL AND HOLD ARRANGEMENTS

A bill and hold arrangement is a contract where an entity bills a customer for a product but the entity retains physical possession of the product until it is transferred

to the customer in the future point in time. This might occur to accommodate a customer's lack of available space for the product or delays in production schedule.

The standard provides that revenue is recognize when the customer obtains control of the product and the entity satisfies a performance obligation. In this situation, a customer may obtain control of the product even though the entity physically possesses the product, that is where the customer has the ability to direct the use of, and obtain substantially all the remaining benefits from, the product even though it has decided not to exercise its right to take physical possession of that product. Consequently, the entity does no longer control the product. Instead, the entity is providing custodial services to the customer over the customer's asset.

In addition to the above-mentioned requirements, all the following criteria must be met of a customer to have obtained control of a product in a bill and hold arrangements:

1. The reason for a bill and hold arrangement must be substantive;
2. The product must be identified separately as belonging to the customer;
3. The product currently must be ready for physical transfer to the customer; and
4. The entity cannot have the ability to use the product or direct it to another customer.

If an entity recognizes revenue in a bill and hold arrangement, the entity shall consider whether it has remaining performance obligation (e.g., custodial services) to which the entity shall allocate a portion of the transaction price in accordance with Step 4 of the revenue model discussed in the preceding section of this chapter.

CONSIGNMENT ARRANGEMENTS

Consignment arrangement is when an entity, as a dealer or distributor, delivers a product to another party, but retains control of the goods. As such, no revenue shall be recognized by the entity on the delivery of the goods to the intermediary; except, when control is transferred to the intermediary or end customer and the performance obligation is satisfied by the entity, then, revenue is recognized.

The following are, among others, are indicators of a consignment arrangements:

1. The entity controls the product until a specified event occurs, such as the sale of the product to a customer of the dealer, or until a specified period expires.
2. The entity is able to require the return of the product or transfer the product to a third party, such as another dealer.

3. The dealer does not have an unconditional obligation to pay for the product, although it might be required to pay a deposit.

(NOTE: This topic shall be discussed in detail in Chapter 14 of this book.)

MULTIPLE CHOICE – Theory of Accounts

TOA 12-1 (Adapted)

According to the definition of revenue provided by IFRS 15, Revenue from Contracts with Customers, which of the following statement is true.

a. Revenue includes cash received from shares issued.
b. Revenue includes cash received from borrowings.
c. Revenue may arise from either ordinary activities or extraordinary activities.
d. Revenue arises from ordinary activities only.

TOA 12-2 (IFRS)

Which of the following are the exceptions for application of IFRS 15, Revenue from Contracts with Customers?

a. Financial audit and lease contracts
b. Lease contracts and insurance contracts
c. Insurance contracts and pharmaceutical contracts
d. Pharmaceutical contracts and financial audit contracts

TOA 12-3 (Adapted)

The revenue model framework provides Step#1 Identify the Contract with the Customer. All of the following are criteria of a contract with a customer within the scope of IFRS 15, except

a. The right of each party in relation to the goods or services to be transferred can be identified.
b. The terms and conditions of payment for the goods or services to be transferred can be identified.
c. The contract has commercial substance.
d. The contract must be in writing only and approved by the parties to the contract.

TOA 12-4 (Adapted)

The first step in the *five-step revenue model* stipulates that certain conditions must be satisfied before an entity can account for a contract with a customer. Which of the following is not one of these conditions?

a. It is certain that the entity will collect the consideration to which it is entitled.
b. The payment can be identified.
c. The entity and the customer have approved the contract and are committed to perform their contractual obligations.
d. Each party's rights with regards to the goods or services concerned can be identified.

TOA 12-5 (Adapted)

Under IFRS 15, when shall an entity recognize revenue from contracts with customers?

a. When it is probable that future economic benefits will flow to the entity and the revenue can be measured reliably.
b. When or as the entity satisfies the performance obligation.
c. When the entity collected the cash from the customers.
d. When the entity and the customers sign the contracts.

TOA 12-6 (Adapted)

Under IFRS 15, how does an entity satisfy the performance obligation on its contracts with customers?

a. Satisfaction of performance obligation over time
b. Satisfaction of performance obligation at a point of time
c. Either A or B
d. Neither A nor B

TOA 12-7 (Adapted)

Which of the following is not a step in recognizing revenue according to IFRS 15?

a. Identify the contract with a customer.
b. Determine the transaction price.
c. Identify the separate performance obligation in a contract.
d. Recognize revenue before title of the asset transfer to the customer.

TOA 12-8 (Adapted)

A contract if wholly unperformed if

a. The entity has not yet transferred any promised goods or services to the customer.
b. The entity has not yet received any consideration in exchange for promised goods or services.
c. The entity in not yet entitled to receive any consideration in exchange for promised goods or services.
d. All of these.

TOA 12-9 (Adapted)

Statement 1: A contract modification is always treated as a separate contract for the purpose of IFRS 15, Revenue from Contract with Customers.

Statement 2: A single contract with a customer could include more than one performance obligation and it is necessary to identify each performance obligation in the contract.

a. Both statements are true
b. Both statements are false
c. Statement 1 is true, Statement 2 is false.
d. Statement 1 is false, Statement 2 is true

TOA 12-10 (Adapted)

A good or service (or bundle of goods or services) that is promised to a customer is distinct if

a. The customer can benefit from the good or service of its own.
b. The customer can benefit from the good or service together with other resources that are available to the customer.
c. The seller's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract.
d. All of these

TOA 12-11 (Adapted)

Under IFRS 15, where a contract with a customer has multiple performance obligations, what will be the accounting treatment to the transaction price?

a. The transaction price shall be recognized as revenue to the most

important performance obligation.

b. The transaction price shall be allocated equally to the different performance obligations.
c. The transaction price shall be allocated to the different performance obligations by reference to their relative stand-alone selling prices.
d. The transaction price shall be recognized as revenue only at the end of completion of all performance obligations.

TOA 12-12 (Adapted)

Under IFRS 15, where the standalone selling prices of the different performance obligations in a contract with a customer are not available, what methods or approaches may be used to allocate the transaction price?

a. Adjusted market assessment approach
b. Expected cost plus a margin approach
c. Residual approach but only permissible in limited circumstances
d. Any of the above

TOA 12-13 (Adapted)

At what amount shall an entity recognize revenue to depict the transfer of promised goods or services to customer that reflect the consideration to which the entity expects to be entitled in exchange for those goods or services?

a. Gross
b. Net
c. Residual
d. Cumulative

TOA 12-14 (Adapted)

On January 1, 2020, Vending Co. enters into a contract with a customer to fabricate a part of specialized equipment for delivery on April 1, 2020. However, the exact delivery date is hard to estimate. The amount of consideration specified in the contract is P100,000, but that amount will be decreased by P250 for each day if delivered after April 1, 2020, or increased by P250 for each day if delivered before April 1, 2020. How should Vending Co. determine a transaction price for this contract?

a. Vending Co. needs to apply the most likely amount method to predict

the amount of consideration, because there is a range of possible outcomes.

b. The transaction price for this contract should be the same as specified in the contract with a customer, which is P100,000.
c. Vending Co. needs to apply expected value method in order to predict the amount of consideration, because there is a range of possible outcomes.
d. The transaction price may only be calculated when the equipment is delivered and exact amount of consideration is known.

TOA 12-15 (Adapted)

Under IFRS 15, the following conditions must be met in order to recognize revenue from the sale of goods, except

a. The company has transferred to the buyer the significant risks and rewards of ownership of the goods.
b. The company has a present right to payment for the asset.
c. The entity has transferred physical possession of the asset.
d. It is possible that the economic benefit will flow to the company.

TOA 12-16 (Adapted)

Under IFRS 15, in which of the following instances will the revenue from contracts with customers be recognized at a point in time instead of over time?

a. When the customer simultaneously receives and consume all of the benefits provided by the entity as the entity performs.
b. When the entity' performance creates or enhances an asset that the customer controls as the asset is created.
c. When the entity's performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for performance completed to date.
d. When the entity has transferred physical possession and legal title to the asset to the customer.

TOA 12-17 (Adapted)

Under IFRS 15, Revenue from Contracts with Customers, the asset is deemed transferred to a customer

a. On the date specified by a contract between the seller and customer.

b. On the date the entity satisfies all performance obligations specified in the contract with the customer.
c. When the customer obtains control over it.
d. When the asset is physically delivered to the customer's promise.

TOA 12-18 (Adapted)

A performance obligation is satisfied over time if
a. The entity's performance creates an asset which has an alternative use to the entity.
b. The entity does not have an enforceable right to payment for the performance that has been completed to date.
c. The entity's performance creates an asset that the customer controls as it is created.
d. The customer does not receive or consume the benefit provided by the entity's performance until obligation is completely satisfied.

TOA 12-19 (Adapted)

Revenue is recognized either *over time* or at a *point in time*. Under which of the following criteria an entity recognizes revenue *over time*?
a. The customer has accepted the asset.
b. The entity has a present right to payment for the asset.
c. The customer has significant risks and rewards related to the ownership of the asset.
d. The entity's performance creates or enhances an asset that the customer control as the asset is created or enhanced.

TOA 12-20 (Adapted)

Under IFRS 15, when shall the incremental cost of obtaining a contract with a customer be recognized as an asset?
a. When it is probable that future economic benefits will flow to the entity and the cost can be measured reliably.
b. When the entity expects to recover those costs.
c. When the costs will provide economic benefits for a period less than 12 months.
d. When the costs will decrease the revenue in the future periods.

TOA 12-21 (Adapted)

Under IFRS 15, which of the following costs can be capitalized as an asset for being incremental cost of obtaining a contract with customer?

a. Salaries of the legal counsel of the entity.
b. Advertising cost to create goodwill for the company.
c. Costs that the entity would not have incurred if the contract had not been successfully obtained such as success fee's paid to agents.
d. Research and development costs to create a good name for the company.

TOA 12-22 (Adapted)

Under IFRS 15, when will the practical expedient of expensing the incremental cost of obtaining a contract with a customer be available?

a. When it is probable that future economic benefits will flow to the entity and the cost can be measured reliably.
b. When the entity expects to recover those costs.
c. When the costs will provide economic benefits for a period less than 12 months.
d. When the costs will increase the revenue in the future periods.

TOA 12-23 (Adapted)

Under IFRS 15, when will the costs incurred to fulfill a contract with a customer be recognized as an asset?

a. When the costs relate directly to a contract (or a specific anticipated contract).
b. When the costs generate or enhance resources of the entity that will be used in satisfying performance obligations in the future.
c. When the costs are expected to be recovered.
d. When all of the above criteria are present.

TOA 12-24 (Adapted)

Under IFRS 15, what shall be presented by the entity in its statement of financial position in relation to its contract with a customer where a customer has paid an amount of consideration prior to the entity performing by transferring the related good or service to the customer?

a. Contract liability
b. Contract asset
c. Contract receivable
d. Contract equity

TOA 12-25 (Adapted)

Under IFRS 15, what shall be presented by the entity in its statement of financial position in relation to its contract with a customer where the entity has performed by transferring a good or service to the customer and the customer has not yet paid the related consideration and the entity's right to consideration is conditional on something other than the passage of time , for example future performance of the entity?

a. Contract liability
b. Contract asset
c. Contract receivable
d. Contract equity

TOA 12-26 (Adapted)

Under IFRS 15, what shall be presented by the entity in its statement of financial position in relation to its contract with a customer where the entity has performed by transferring a good or service to the customer and the customer has not yet paid the related consideration and the entity's right to consideration is unconditional except for the passage of time?

a. Contract liability
b. Contract asset
c. Contract receivable
d. Contract equity

TOA 12-27 (Adapted)

A sale should not be recognized as revenue by the seller at the time of sale if

a. Payment was made by check.
b. Purchased on account.
c. The buyer has a right to return the product and the amount of future returns cannot be estimated reliably.
d. The selling price is less than the normal selling price.

TOA 12-28 (Adapted)

Which of the following is not an available alternative when the seller is exposed to continued risks of ownership through right of return of the product?

a. Recording the sale and accounting for return as they occur in future periods.
b. Recording the sale but reducing sales by an estimate of future returns.
c. Not recording a sale until all return privileges have expired.
d. All of these are alternatives.

TOA 12-29 (Adapted)

Which of the following least likely apply to an entity as a principal?

a. Controls the specified good or service before it is transferred to a customer.
b. Has inventory risk before the specified good or service is transferred to a customer or after transfer of control to the customer.
c. Assumes another entity's performance obligations and contractual rights in the contract.
d. When performance obligation is satisfied, it recognizes revenue in the gross amount of consideration to which it expects to be entitled in exchange for the transferred good or service.

TOA 12-30 (Adapted)

Which of the following least likely apply to an entity as an agent?

a. Arrange for goods or services to be provided by other party.
b. Does not control the specified good or service provided by other party before it is transferred to the customer.
c. Recognizes revenue in the amount of any fees or commission.
d. Has discretion in establishing the price for the specified good or service.

TOA 12-31 (Adapted)

An entity operates website called a market place that arrange for the provision of goods or services from different suppliers, who deliver it directly to the customer. The website facilitates payment between the supplier and the customer at prices that are set by the supplier. The entity has no further obligations to the customer after arranging for the products to be provided to the customer. Their contract stipulates that the entity is entitled to a commission based on the sales price of the goods. Which of the following statements is correct?

a. The entity controls the specified goods before they are transferred to customer using the website.
b. The entity is an agent and recognizes revenue in form of commission.
c. The entity has the ability to direct the use of the goods transferred to customer.
d. The entity controls the suppliers' inventory of goods used to fulfill the orders placed by customer using the website.

TOA 12-32 (Adapted)

What is the accounting principle applied by IFRS 15, Revenue from Contract with Customers, when determining revenue that should be recognized in respect of a repurchase arrangement?

a. Prudence
b. Relevance
c. Verifiability
d. Substance over form

TOA 12-33 (Adapted)

Which of the following is an example of distinct license?

a. Media content that the customer can access only via an online service.
b. Drug compound that requires proprietary research and development services from the entity.
c. A promise to grant the license and to provide the manufacturing services to produce drug that is not unique or specialized and other several other entities can also manufacture for the customer.
d. Software embedded in the operating system of a car.

TOA 12-34 (Adapted)

Sales in which the buyer is not yet ready to take delivery but does take title is called

a. Barter
b. Bill and hold
c. Buy back
d. Layaway

TOA 12-35 (Adapted)

Which of the following is not a required criterion to be met for a customer to have control of a product in a bill and hold arrangement?

a. The entity has the ability to use the product or to direct it to another customer.
b. The customer has requested the arrangement.
c. The product must be identified separately as belonging to the customer.
d. The product must be ready for physical transfer to the customer.

MULTIPLE CHOICE - Problems

PROB. 12-1 (Adapted)

Consultation Co. provides consulting services to its customers. In January, the company wins a contract to provide consulting services to a new customer and incurs the following costs to obtain a contract:

External legal fees for due diligence	10,000
Travel costs to deliver proposal	5,000
Commissions to sales employees	20,000
Total	35,000

What is the amount of expenses to be reported as incurred?

a. 15,000
b. 20,000
c. 25,000
d. 30,000

PROB. 12-2 (Adapted)

Excellent Co. provides consulting services to its customers. The company wins a contract to provide financial consulting services to a new customer and incurs the following costs to obtain a contract:

External legal fees for due diligence	10,000
Travel costs to deliver proposal	5,000
Commissions to sales employees	20,000
Discretionary annual bonuses to sales supervisors	50,000
Total	85,000

What is the amount of asset to be recognized by Excellent Co.?

a. 15,000
b. 20,000
c. 50,000
d. 70,000

PROB. 12-3 (Adapted)

Asiatic Co. enters into a contract to build a plant for a customer to be completed on October 31, 2020 for a price of P20,000,000. The agreement provides that Asiatic should receive an additional P2,500,000 representing incentive if the company completed the plant by September 30, 2020; and the contract price will be reduced by P2,500,000 if the plant is not completed until November 30, 2020. The company estimates that there is a 15% probability that the plant will be completed by September 30, 2020, an 80% probability that it will be completed in October 2020 or November 2020, and a 5% probability that it will not be completed until after November 30, 2020. What is the expected value of the transaction price for this contract?

a. 20,000,000
b. 20,125,000
c. 10,975,000
d. 20,250,000

PROB. 12-4 (Adapted)

Company X enters into a contract to supply three distinct products to a customer. The promise to supply each of these products is regarded as a separate performance obligation. The stand-alone prices of these three products (if sold singly) are:

Product – A	P 125,000
Product – B	240,000
Product – C	275,000

If the agreed contract price is P576,000, how should this amount be allocated to performance obligations?

a.	Product – A	192,000
	Product – B	192,000
	Product – C	192,000
b.	Product – A	112,500
	Product – B	216,000
	Product – C	247,500
c.	Product – A	125,000
	Product – B	240,000
	Product – C	275,000

d.	Product – A	103,670
	Product – B	218,670
	Product – C	253,660

PROB. 12-5 (Adapted)

Excel Co. agreed to pay a 10% royalty to National Corp. for the use of intellectual property rights Excel Co. requires to make sales to its customers. Excel Co.'s sales for the period amount to P1,000,000. In providing the goods and services itself, Excel Co. is the principal in the sales made with its customers. What is the amount of revenue to be recognized by Excel in its financial statements?

a. 100,000
b. 900,000
c. 1,000,000
d. 1,100,000

ANSWERS – Theory of Accounts

TOA 12-1 *Suggested answer (d) Revenue arises from ordinary activities only.*

IFRS 15 defines revenue as an income arising from the course of an entity's ordinary activities.

TOA 12-2 *Suggested answer (b) Lease contracts and insurance contracts*

IFRS 15, Revenue from Contracts with Customers, does not apply to:

a. *Lease contracts (IAS 17)*
b. *Insurance contracts (IFRS 4)*
c. *Financial instruments and other contractual rights or obligations (IFRS 9), (IFRS 10), (IFRS 11), (IAS 27), (IAS 28)*
d. *Guarantees (other than product or service warranties*
e. *Non-monetary exchanges between entities in the same line of business that facilitate sales to customers or potential customers*

TOA 12-3 *Suggested answer: (d)*

According to step #1, Identify the Contract with Customer, parties to the contract have approved the contract in writing, orally or in accordance with other customary business practices and are committed to perform their respective obligations.

TOA 12-4 *Suggested answer (a)*

All of the following are the criteria to be met as provided in Step #1:

1. *Parties have approved the contract.*
2. *Each party's right can be identified.*
3. *Payment terms and conditions can be identified.*
4. *Contract has commercial substance.*
5. *Collection is probable.*

TOA 12-5 *Suggested answer (b) When or as the entity satisfies the performance obligation*

TOA 12-6 *Suggested answer (c) Either A or B*

TOA 12-7 *Suggested answer: (d)*

IFRS 15, Revenue from Contracts with Customers, provides the following five-step model for recognizing revenue from contracts with customer:

Step 1 – Identify the contract with the customer.
Step 2 – Identify the performance obligations in the contract.
Step 3 – Determine the transaction price.
Step 4 – Allocate the transaction price to the performance obligations in the contract.
Step 5 – Recognize revenue when (or as) the entity satisfies a performance obligation.

TOA 12-8 *Suggested answer (d) All of these*

According to IFRS 15, contract is wholly unperformed if the following criteria are met:

1. *The entity has not yet transferred any promised goods or services to the customer; and*
2. *The entity has not yet received, and is not yet entitled to receive, any consideration in exchange for promised goods or services.*

TOA 12-9 *Suggested answer (d) Statement 1 is false, Statement 2 is true*

A contract is considered a separate contract if the conditions provided by IFRS 15 are met; otherwise, the entity's accounting for the modification is based on whether the remaining goods or services under the modified contract is distinct, where the entity accounts for the modification as if it were a termination of the existing contract and the creation of a new contract. Therefore, a contract modification is not always treated as a separate contract.

A contract may have a series of distinct goods or services; thus, in case of many performance obligations, an entity shall identify the performance obligations and shall allocate the transaction price to those performance obligations by reference to their relative stand-alone selling prices. Therefore, Statement 2 is true.

TOA 12-10 *Suggested answer (d) All of these*

A good or service (or bundle of goods or services) is distinct if the customer can benefit from the goods or services on its own or in conjunction with other readily

available resources; and the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract.

TOA 12-11 *Suggested answer (c)*

TOA 12-12 *Suggested answer (d) Any of these*

TOA 12-13 *Suggested answer (a) Gross*

As per Step #3 of the revenue model framework, revenue is measured at the gross amount of the transaction price less the expected level of returns calculated using the guidance on estimating variable consideration and constraint.

TOA 12-14 *Suggested answer (c)*

The expected value method is applicable when an entity has a population of similar transaction and to use this portfolio of data to estimate the transaction price for an individual contract is appropriate.

TOA 12-15 *Suggested answer: (d)*

Revenue is recognized when it satisfies a performance obligation; that is, when control is passed, either over time or at a point in time. Control passes when, but not limited to:

- *The customer has significant risks and rewards related to the ownership of the asset.*
- *The company has a present right to payment for the asset.*
- *The entity has transferred physical possession of the asset.*

TOA 12-16 *Suggested answer (d)* When the entity has transferred physical possession and legal title to the asset to the customer.

TOA 12-17 *Suggested answer (c) When the customer obtains control over it.*

According to IFRS 15, an entity recognizes revenue when or as it satisfies a performance obligation by transferring a good or service to a customer either at a point in time or over time. A good or service is deemed transferred when or as the customer obtains control of it. Control is the ability to direct and to prevent others from directing the use of and obtain substantially all of the remaining benefits from the asset.

TOA 12-18 *Suggested answer (c)*

A performance obligation is satisfied over time if one of the following criteria is met:

1. *The customer simultaneously receives and consumes the benefits provided by an entity's performance as the entity performs.*
2. *The entity's performance creates or enhance an asset that the customer controls as the asset is created or enhance.*
3. *The entity's performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for performance completed to date.*

TOA 12-19 *Suggested answer (d)*

Criteria for the recognition of revenue over time include (d) The entity's performance creates or enhances an asset that the customer control as the asset is created or enhanced. *Other above-mentioned choices are criteria for the recognition of revenue at a point of time.*

TOA 12-20 *Suggested answer (b) When the entity expects to recover those costs*

TOA 12-21 *Suggested answer (c)*

TOA 12-22 *Suggested answer (c)*

TOA 12-23 *Suggested answer (d) When all of the above criteria are present*

TOA 12-24 *Suggested answer (a) Contract liability*

TOA 12-25 *Suggested answer (b) Contract asset*

TOA 12-26 *Suggested answer (c) Contract receivable*

TOA 12-27 *Suggested answer: (c)*

If the product to be returned can be reasonably estimated, an entity records a provision for the expected return. However, if a reasonable estimate cannot be made, the revenue recognition is deferred until the return period lapses or a reasonable estimate can be made.

TOA 12-28 *Suggested answer: (a)*

Under the IFRS 15, when an entity makes a sale with a right of return, it recognizes revenue at the amount to which it expects to be entitled by applying the variable consideration and constraint guidance set-out in Step #3 of the revenue model framework. This means that revenue is measured at the gross transaction price less the expected level of returns calculated using the guidance on estimating variable consideration and constraint.

TOA 12-29 *Suggested answer: (c)*

When another entity has assumed the performance obligation and contractual rights in a contract thereby the entity is no longer obliged to satisfy the performance obligation, an entity is no longer acting as a principal. The entity shall not recognize revenue for that performance obligation. Instead, the entity shall evaluate whether it is now acting as an agent.

TOA 12-30 *Suggested answer: (d) Has discretion in establishing the price for the specified good or service.*

Establishing the price that the customer pays for the specified good or service may indicate that an entity has the ability to direct the use of that good or service and obtain substantially all of the remaining benefits, and therefore, a principal. However, in certain case, an agent may have discretion in establishing prices in order to generate additional revenue form its own service of arranging for goods or services to be provided by other parties to customer.

TOA 12-31 *Suggested answer: (b) The entity is an agent and recognizes revenue in form of commission*

The entity is an agent because its performance obligation is to arrange for the provision of goods by the supplier, who delivers the goods directly to the customer. When the entity satisfies its promise to arrange for the goods to be provided by the supplier to the customer, the entity recognized revenue in form of commission to which it is entitled.

TOA 12-32 *Suggested answer (d) Substance over form*

If an entity has an obligation or a right to repurchase the asset (e.g. forward contract, call option), a customer does not obtain control of the asset because the

customer is limited in its ability to direct the use of, and obtain substantially all of the remaining benefits from the asset even though the customer may have physical possession of the asset.

TOA 12-33 *Suggested answer (c)*

The customer can benefit from the license together with readily available resources other than the manufacturing services because there are other entities that can provide the manufacturing services. The license and the manufacturing services are not highly interdependent or highly interrelated because they do not significantly affect each other. Therefore, the promise to grant the license and to provide manufacturing services are distinct with two performance services: license of patent rights; and manufacturing services.

"A" and "B" are licenses from which the customer can benefit only in conjunction with a related service. "D" is a license that forms a component of a tangible good and is integral to the functionality of the good.

TOA 12-34 *Suggested answer: (b) Bill and hold*

IFRS 15 defines Bill and Hold arrangement as a contract where an entity bills a customer for a product, but the entity retains physical possession of the product until it is transferred to the customer in the future point in time.

TOA 12-35 *Suggested answer (a)*

Under a bill and hold arrangement, a customer may obtain control of a product even though the physical possession of the product remains with the entity. In that case, even though it has decided not to exercise its right to take possession of that product, the customer has the ability to direct the use of and obtain substantially all of the remaining benefits from the product. Therefore, the entity (seller) does not control the product. Instead, it is providing custodial services to the customer over the customer's asset.

SOLUTIONS - Problems

PROB. 12-1 *Suggested answer (a) 15,000*

The cost incurred in the effort to obtain a contract that are payable irrespective of whether the effort is successful cannot be capitalized. Only costs that would not have been incurred if the effort was not successful are recognized as an asset.

Therefore, external legal fees and travel costs are recognized as expense when incurred (unless within the scope of another standard), because these would have been incurred regardless of whether the contract was obtained. The incremental cost of obtaining the contract arising from the commissions to sales employees is recognized as an asset, because it is expected to be recovered through future fees for the consulting services.

PROB. 12-2 *Suggested answer (b) 20,000*

Again, the cost incurred in the effort to obtain a contract that are payable irrespective of whether the effort is successful cannot be capitalized. Only costs that would not have been incurred if the effort was not successful are recognized as an asset.

The incremental cost of obtaining the contract arising from the commissions to sales employees is recognized as an asset, because it is expected to be recovered through future fees for the consulting services. The discretionary bonuses paid to sales supervisors shall not be recognized as an asset because these are not directly attributable to identifiable contracts. While external legal fees and travel costs are expensed as incurred, because these would have been incurred regardless of whether the contract was obtained.

PROB. 12-3 *Suggested answer (d) 20,250,000*

September 30, 2020: [15%(20,000,000+2,500,000)]	*3,375,000*
October -- November 2020: (80% x 20,000,000)	*16,000,000*
After November 30, 2020: [5%(20,000,000-2,500,000)]	*875,000*
Expected value of the transaction price	*20,250,000*

Again, the expected value method is applicable when an entity has a population of similar transactions and to use this portfolio of data to estimate the transaction price for an individual contract is appropriate. In this case, the transaction price may be an amount that is not a possible outcome for an individual contract but still a representative of the expected transaction price.

PROB. 12-4 *Suggested answer (b)*

Product – A	125,000	125/640	**112,500**
Product – B	240,000	240/640	**216,000**
Product – C	275,000	275/640	**247,500**
	640,000		576,000

Where a contract has multiple performance obligations, an entity shall allocate the transaction price to the performance obligations in the contract using their relative stand-alone selling prices. The best evidence of this is an observable price from stand-alone sales of the good or service to similarly situated customer. If the stand-alone selling price is not directly observable, an entity will need to estimate it. IFRS 15 suggests various methods that may be used, including: Adjusted market assessment approach, Expected cost plus a margin approach; or, Residual approach (only permissible in limited circumstances).

PROB. 12-5 *Suggested answer: (c) 1,000,000*

As the principal in respect of the sales to its customers, Excel Co. should recognize in its financial statements the revenue on gross basis in the amount of P1,000,000. The 10% royalty of P100,000 as a cost of fulfilling the contract.

Chapter 13

LONG-TERM CONSTRUCTION CONTRACTS

Introduction

IFRS 15, Revenue from Contracts with Customers, outlines a single comprehensive model of revenue recognition arising from contracts with customers. This new standard supersedes IAS 11, Construction Contracts, and IAS 18, Revenue. Under IFRS 15, revenue is recognized when control of those goods has transferred to the customer. The core principle underlying this new standard is that an entity should recognize revenue in a manner that depicts the pattern of transfer of goods and services to customers.

CONSTRUCTION CONTRACTS

A construction contract may be negotiated for the construction of a single asset, such as bridge, building, dam, pipeline, road, ship or tunnel. A construction may also deal with the construction of a number of assets which are closely interrelated or interdependent in terms of their design, technology and function or their ultimate purpose or use. Examples of such contracts include those for the construction of refineries and other complex pieces of plant and equipment. Construction contracts are formulated in a number of ways which are classified as:

1. **Fixed Price Contract**

   It is a construction contract in which the contractor agrees a fixed contract price, or a fixed rate per unit of output, which in some cases is subject to cost escalation clauses.

2. **Cost Plus Contract**

   It is a construction contract in which the contractor is reimbursed for allowable or otherwise defined costs, plus a percentage of these costs or a fixed fee.

Again, the expected value method is applicable when an entity has a population of similar transactions and to use this portfolio of data to estimate the transaction price for an individual contract is appropriate. In this case, the transaction price may be an amount that is not a possible outcome for an individual contract but still a representative of the expected transaction price.

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CONSTRUCTION COSTS

The new standard does not seek to provide comprehensive guidance on the accounting for contract cost. However, it includes specific guidance on (1.) costs of obtaining a contract, (2.) costs of fulfilling a contract, among others.

Costs of Obtaining a Contract

These are costs that an entity incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained (e.g. sales commission). These incremental costs of obtaining a contract shall be recognized as an *asset*, if the entity expects to recover those costs. However, cost of obtaining a contract that would have been incurred regardless whether the contract was obtained shall be recognized as an *expense* when incurred, unless those costs are explicitly chargeable to the customer regardless of whether the contract is obtained.

Costs of Fulfilling a Contract

If the costs incurred in fulfilling a contract with a customer are not in the scope of another standards (e.g. Inventories, Property, Plant and Equipment, Intangibles), an entity shall recognize an asset only if that costs to fulfill meet the following criteria:

- Relate directly to an existing contract or specific anticipated contract (e.g. direct materials, direct labor, allocation of costs that relate directly to the contract, like costs of contract management and supervision, depreciation and amortization);
- Generate or enhance resources that will be used to satisfy performance obligations in the future; and
- Expected to be recovered.

On the other hand, the following costs are *expensed* when incurred:

1. General and administrative costs, unless explicitly chargeable under the contract.
2. Costs that relate to satisfied performance obligations

3. Costs of wasted materials, labor or other contract costs.
4. Costs that do not clearly relate to unsatisfied or partially satisfied performance obligations.

CONSTRUCTION REVENUE

Construction revenue the total amount of consideration received or receivable. The measurement of contract revenue is affected by variety of uncertainties that depend on the outcome of future events. The estimates often need to be revised as events occur and uncertainties are resolved. Therefore, the amount of contract revenue may increase or decrease from one period to the next.

Revision of estimates may be effected by variation or change order, which is an instruction by the customer for a change in the scope of the work to be performed under the contract. A variation may lead to an increase or a decrease in contract revenue.

CONTRACT MODIFICATIONS

A contract modification is a change in the scope or price (or both) of a contract that is approved by the parties to the contract. It may be a "change order", "variation", or an "amendment".

Modification should be treated as an adjustment to the original contract unless they merely add a further performance obligation that is both distinct and priced based on an appropriately adjusted stand-alone selling price. If both conditions are met, the modification is treated as a new and separate contract. Modification as separate contract follows that the original contract is treated as unmodified for the purpose of this standard.

If the modification is treated as an adjustment to the original contract, the appropriate accounting treatment depends on the remaining goods or services to be delivered, such as:

- Remaining goods or services are distinct.

  Treated prospectively by allocating the remaining transaction price to the remaining performance obligation.

- Remaining goods or services are not distinct.

  Treated retrospectively by updating both the transaction price and the measure of progress for the part-complete performance obligation.

- Remaining goods or services are combination of distinct and not distinct.

  Professional judgment shall be used to account for the modification in a manner consistent with the objectives of the contract modification requirements in IFRS 15.

SATISFACTION OF PERFORMANCE OBLIGATION

As discussed in the preceding chapter, IFRS 15 provides that in order to determine when and what amount of revenue will be recognized, entities shall apply a five-step model. This model specifies that revenue is recognized as an entity transfers control of goods or services to a customer at an amount to which the entity expects to be entitled. Depending on whether certain criteria are met, revenue is recognized:

- **Over time,** in a manner that best reflects the entity's performance.
- **At a point in time**, when control of the goods or services is transferred to the customer.

At the inception of the contract, an entity shall evaluate whether it transfers control of the goods or services *overtime* based on the following criteria:

1. The customer simultaneously receives and consumes the benefits provided by the entity's performance as the entity performs (e.g., cleaning services).
2. The entity's performance creates or enhances an asset that the customer controls as the asset that the customer controls as the asset is created o enhanced (e.g., constructing an asset in the customer's site).
3. The entity's performance does not create an asset with an alternative use to the entity, and the entity has an enforceable right to payment for performance completed to date (e.g., constructing an specialized asset that only the customer can use , or constructing an asset to a customer specifications).

If one or more of these criteria are met, then the entity shall recognize revenue *over time*, using a method that depicts its performance. However, if none of these is met, then the entity recognizes revenue *at a point in time* at which it transfers control of good or service to the customer. Note that the new standard is a control-based model.

And if the performance obligation cannot be satisfied *over time*, revenue is recognized *at a point in time* at which control of good or service is transferred.

MEASURING PROGRESS

For each performance obligation that is satisfied *over time*, an entity shall select an appropriate method to be applied consistently to similar performance obligation, such as:

- **Output method**
  This method is based on direct measurement of the value to the customer of goods or services transferred to date, relative to the remaining goods or services promised to be delivered under the contract (e.g., Survey of performance to date, Appraisal of results achieved, Time elapsed, Units produced, etc.).

- **Input method**
  This method is based on an entity's efforts or inputs toward satisfying a performance obligation, relative to the total expected inputs to the satisfaction of that performance obligation (e.g., Resources consumed, Cost incurred, labor hours rendered, machine hours used, etc.).

In identifying an appropriate method, judgment is required. It needs to consider the nature of the good or service that is promised to deliver to the customer. When evaluating which method depicts the transfer of control of a good or service, the entity's ability to apply that method is relevant.

RECOGNITION OF REVENUE

As discussed in the preceding section, revenue shall be recognized ***over time*** if one or more of the aforementioned criteria are met; otherwise revenue shall be recognized ***at a point in time***. Further, in recognizing revenue *over time*, a measure of progress (e.g., output or input method) must be determined to ensure that it faithfully depicts the entity's performance.

Under IAS 11, Construction Contracts, revenue is recognized using the *percentage of completion method* and eventually superseded by IFRS 15. However, IFRS 15 contains guidance consistent with the underlying concept supporting the percentage of completion method. Note that the various input and output methods (e.g., Survey of

performance to date, Appraisal of results achieved, Time elapsed, Resources consumed, Cost incurred, labor hours rendered, machine hours used, etc.) are consistent with those methods referred to under the percentage of completion method in IAS 11, Construction Contracts. Therefore, due to the similarities of these methods the ***percentage of completion method is still appropriate under IFRS 15.***

In the scope of IAS 11, using the percentage of completion, revenue is recognized based on the stage of completion of the transaction at the reporting date; whereas, IFRS 15 applies a control-based approach, that is control can be transferred either ***over time*** or ***at a point in time.***

Again, if a performance obligation is not satisfied *over time*, then an entity recognizes revenue *at a point in time* at which it transfers control of the good or service to the customer. An asset is deemed transferred when (or as) the customer obtains control of that good or service. Control of an asset refers to the ability to direct the use of and obtain substantially all the remaining benefits from the asset. Control includes the ability to prevent other entities from directing the use of and obtaining the benefits from an asset. The following are indicators that control has passed to the customer:

1. The customer has a present obligation to pay.
2. The customer has physical possession of the good or service.
3. The customer has a legal title.
4. The customer has risks and rewards of ownership.
5. The customer has accepted the asset.

IAS 11 indicates that, at early stages, when the outcome of a contract cannot be estimated reliably but probable that the entity can recover the contract cost incurred, the recognition of revenue is restricted to cost incurred that are expected to be recoverable and no profit is recognized (i.e., ***Cost recovery method***). However, if it is probable that the contract cost will exceed the total contract revenue, then any expected excess is recognized as an expense immediately. This is consistent with the requirements of IFRS 15 that revenue is recognized only to the extent of the cost incurred (i.e., at a ***zero percent profit margin***) until the entity can reasonably measure its progress.

Based on the foregoing circumstances, the author concludes that the **Percentage of Completion method is the same as revenue recognition *over time;*** and the **Cost Recovery method is the same as revenue recognition *at a point in time.***

LOSS MAKING CONTRACTS

Where the revenue and costs in a contract have been assessed and it is expected that a loss will be incurred, that loss should be recognized as an expense immediately. The loss should not be deferred until the project is completed or spread over the period of the contract. This means that when a loss has been identified, there is no need to estimate the contract's stage of completion.

FINANCIAL STATEMENT PRESENTATION

IFRS 15 requires an entity to present a contract asset or a contract liability in its Statement of Financial Position when either party to the contract has performed. Performance is when an entity transfers goods or services to the customer and the customer pays consideration to the entity.

This standard uses the terms "contract asset" and "contract liability" but does not prohibit an entity from using alternative descriptions in the Statement of Financial Position. However, it needs to provide sufficient information to distinguish a contract asset from a receivable.

Contract assets and contract liabilities are presented in the Statement of Financial Position as current; since these are expected to be realized or settled within the entity's normal operating cycle. However, in some cases where a contract extends beyond a normal operating cycle, contract assets and contract liabilities should be analyzed between current and non-current in accordance with IAS 1, Presentation of Financial Statements.

IAS 1 prohibits offsetting assets and liabilities unless required or permitted by an IFRS. Neither IFRS 15 nor any other IFRS requires or permits in respect of contract assets and liabilities. Therefore, it is not possible for entities to offset other assets and liabilities against contract assets and contract liabilities. However, when multiple contracts accounted for as a single combined contract contains more than one performance obligations, an entity should not present separate contract assets and contract liabilities for those performance obligations. The appropriate unit of account for presenting these assets and liabilities is the contract as a whole. In other words, it is not appropriate to present both contract assets and contract liabilities for a single contract; instead, a single net figure, as either contract asset or contract liability, should be presented. Note that the rights and obligations in a contract with a customer are interdependent. And those interdependencies are best reflected by

accounting and presenting on a net basis the remaining rights and obligations in the Statement of Financial Position (IFRS 15:BC317).

Contract Asset

This is a right to consideration in exchange for goods or services transferred by an entity to a customer. Note that the right is conditional on something other than the passage of time. Any unconditional rights to consideration are presented separately a a *receivable*. A right to consideration is unconditional if only the passage of time is required before payment becomes due.

An entity shall assess a contract asset for impairment in accordance with IFRS 9.

Contract Liability

This is an entity's obligation to transfer goods or services to a customer for which the entity has received consideration (or an amount of consideration is due) from the customer.

ACCOUNTING FOR SMALL AND MEDIUM-SIZED ENTITIES (SMEs)

Section 23, *Revenue,* shall be applied in accounting for revenue arising from several transactions, including construction contracts in which the entity is the contractor. The requirements of this section are usually applied separately to each construction contract. However, in some circumstances, it is necessary to apply this section to the separately identifiable components of a single contract or to a group of contracts together in order to reflect the substances of a contract or a group of contract, in the same way similar with the full IFRS/PFRS for construction contracts.

When the outcome of a construction contract can be estimated reliably, an entity shall recognize contract revenue and contract costs associated with the construction contract as revenue and expenses respectively by reference to stage of completion of the contract activity at the end of the reporting period, often referred to as the *percentage of completion* method.

Under this method, reliable estimation of the outcome requires reliable estimates of the stage of completion, future costs and collectability of billings. An entity shall

review and when necessary, revise the estimates of revenue and costs as the service transaction or construction contract progresses.

An entity shall determine the stage of completion of a transaction or contract using the method that measures most reliably the work performed, which include:

- The proportion that costs incurred for work performed to date bear to the estimated total costs.
- Surveys of work performed.
- Completion of a physical proportion of the service transaction or contract work.

An entity shall recognize costs that relate to future activity on the transaction or contract, such as for materials or prepayments, as an asset if it is probable that the costs will be recovered, or else shall be recognized as an expense.

When the outcome of the construction contract cannot be estimated reliably:

- An entity shall recognize revenue only to the extent of contract costs incurred that it is probable will be recoverable; and
- The entity shall recognize contract costs as an expense in the period in which they are incurred.

When it is probable that total contract costs will exceed total contract revenue on a construction contract, the expected loss shall be recognized as an expense immediately, with corresponding provision for an onerous contract.

If the collectability of an amount already recognized as contract as contract revenue is no longer probable, the entity shall recognize the uncollectible amount as an expense rather than as an adjustment of the amount of contract revenue.

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TOA 13-4 (IFRS)

The Palace Co., a construction company, has December 31 year end. It is to build a factory for a client and has scheduled its work as follows:

March 20, 2020	Contract to be awarded and signed.
April 25, 2020	Construction work to commence.
November 27, 2020	Principal construction work to be completed.
December 30, 2020	Final completion of contract.

According to IFRS 15, what is the maximum expected period over which the costs attributable to the contract should be accumulated?

a. March 20, 2020 to December 30, 2020
b. April 25, 2020 to November 27, 2020
c. April 25, 2020 to December 30, 2020
d. March 20, 2020 to November 27, 2020

TOA 13-5 (AICPA)

How should the balances of progress billings and construction in progress be shown at reporting dates prior to the completion of a long-term contract?

a. Progress billings as deferred income, construction in progress as a deferred expense.
b. Progress billings as income, construction in progress as inventory.
c. Net, as current asset if debit balance and current liability if credit balance.
d. Net, as income from construction if credit balance, and loss from construction is debit balance.

TOA 13-6 (IFRS)

A rationale in recognizing revenue over the life of a contract rather than at single point in time is:

a. It is a better match with legal ownership.
b. It results in a lower income tax.
c. Results are more conservative.

d. It provides a better measure of periodic revenue.

TOA 13-7 (IFRS)

One of the conditions that must be satisfied in order to recognize revenue in a transaction involving the rendering of services is that the stage of completion of the transaction at the end of the reporting period can be measured reliably.

Which TWO of the following methods for determining the stage of completion of a contract involving the rendering of services are specifically referred to as being acceptable?

1. Cost incurred to date as a percentage of the estimated total costs of the transaction.
2. Advances received to date as a percentage of the total amount receivable.
3. Survey of work performed.
4. Revenue to date divided by total contract revenue.

a. Methods 1 and 2
b. Methods 1 and 3
c. Methods 1 and 4
d. Methods 3 and 4

TOA 13-8 (Adapted)

IFRS 15 specifies the accounting treatment in the case that the outcome of a construction contract cannot be reliably assessed. The treatment specified is:

a. Contract costs must be deferred and matched against revenue in the year in which they are recognized where it is not probable that the costs will be recovered in the current period; and where it is probable that the costs will be recovered in the current period, revenue must be recognized only to the extent of the costs incurred.
b. Construction cost must be recognized as a contra asset in the year in which they are incurred and set-off against the receivable recorded on the contract; and where the receivable is less than the accrued costs, the difference must be written off as an expense in the period.
c. Contract costs must be recognized as an expense in the year in which they are incurred; and where it is probable that costs will be recovered, revenue must be recognized only to the extent of the costs incurred.
d. Construction costs must be accrued and reported as a deferred asset to

the extent that it is considered probable that the costs will be recovered; and revenue may be recognized only to the extent of the costs incurred.

TOA 13-9 (Adapted)

If a company cannot reasonably measure the outcome of a transaction involving the providing of a service, it should recognize revenue

a. Straight line over the period of the service contract.
b. By using the percentage of completion method based on costs incurred compared to total estimated costs.
c. By recording an equal amount of revenue for each service performed.
d. Only to the extent of the costs incurred that are expected to be recovered.

TOA 13-10 (Adapted)

Contract revenue in construction contract comprise

a. The initial amount of revenue agreed in the contract only.
b. Variation in contract work, claims and incentive payment only.
c. The initial amount of revenue agreed in the contract, variation in contract work, claim and incentive payment.
d. The initial amount of revenue agreed in the contract and progress billings.

TOA 13-11 (Adapted)

The measurement of contract revenue is affected by a variety of uncertainties that depend on the outcome of future events. Which statement is incorrect?

a. A contractor and a customer may agree on variations and claims that increase or decrease contract revenue subsequently.
b. The amount of revenue agreed in a fixed price contract may increase as a result of cost escalation clause.
c. The amount of revenue may increase as a result of penalties arising from delays caused by the contractor in the completion of the contract.
d. When a fixed price contract involves a fixed price per unit of output, contract revenue increases as the number of units is increased.

TOA 13-12 (Adapted)

A building contractor has a contract to construct a large building. It is estimated that the building will take 2 years to complete. Progress billings will be sent to the customer at quarterly intervals. Which of the following describes the preferable point for revenue recognition for this contract?

a. After the contract is signed.
b. As progress is made toward completion of the contract.
c. As cash is received.
d. When the contract is completed.

TOA 13-13 (IFRS)

The Hogbean Co. is a construction company that has the following costs on its contracts:

1. Project managers' costs
2. Destruction of an existing building
3. Restoration of an old factory

According to IFRS 15, which costs may be included within contract costs?

a. Cost (1) and cost (2) only
b. Cost (1) and cost (3) only
c. Cost (2) and cost (3) only
d. Cost (1), (2), and (3)

TOA 13-14 (Adapted)

Contract costs of a construction contract comprise all of the following, except

a. Costs that directly relate to the specific contract.
b. Costs that are attributable to contract activity in general and can be allocated to the contract.
c. Such other costs that are specifically chargeable to the customer under the terms of the contract.
d. General administration costs for which reimbursement is not specified in the contract.

TOA 13-15 (Adapted)

In general, contract costs incurred in relation to a contract with a customer must be:

a. Recognized as an asset if they are not expected to be recovered.

b. Recognized as an expense when incurred.
c. Recognized as an asset if they relate to a performance obligation which has not yet been satisfied.
d. Recognized as an asset if they relate to a performance obligation which has been satisfied.

TOA 13-16 (Adapted)

One of the most popular input measures used to determine the progress toward completion in the percentage of completion method is
a. Revenue-percentage basis
b. Cost-percentage basis
c. Progress completion basis
d. Cost-to-cost basis

TOA 13-17 (Adapted)

In accounting for a long-term construction contract using the percentage of completion method, the progress billings on contract account is
a. Contra current asset account.
b. Contra non-current asset account.
c. Noncurrent liability account.
d. Revenue account.

TOA 13-18 (Adapted)

The percentage of completion method that may be used to account for construction contracts can be justified on the basis that:
a. The contractor will be continuously working and therefore earning revenue.
b. In most long-term construction projects, payments are made periodically throughout the life of the contract allowing revenue to be recognized.
c. It is unreasonable to expect a contractor to record revenue only when construction is completed.
d. The contracting firm has a basis for measuring completion at particular interim dates.

TOA 13-19 (Adapted)

In the case of a fixed price contract, what are the four conditions that must all be met in order for the percentage of completion method to be applied. These conditions include:

a. Costs related to the contract can be clearly identified and measured reliably.
b. It is probable that the economic benefits arising from the contract will flow to the contractor.
c. The entity commissioning the work has a good credit rating and is able to pay its debts.
d. Costs related to the contract can be clearly identified and measured reliably and it is probable that the economic benefits arising from the contract will flow to the contractor.

TOA 13-20 (AICPA)

The calculation of the income recognized in the third year of a 5-year construction contract accounted for using the percentage of completion method includes the ratio of

a. Total costs incurred to date to total estimated costs.
b. Total costs incurred to date to total billings to date.
c. Costs incurred in year 3 to total estimated costs.
d. Costs incurred in year 3 to total billings to date.

TOA 13-21 (Adapted)

The percentage of completion of a construction contract is based on all of the following, except

a. The proportion that contract costs incurred for work performed to date bear to the estimated total contract costs.
b. Survey of work performed.
c. Completion of a physical proportion of the contract work.
d. Progress payments and advances received from customers.

TOA 13-22 (AICPA)

A company used the percentage of completion method of accounting for a 4-year construction contract. Which of the following items should be used to calculate the income recognized in the second year?

	Income previously recognized	Progress billings to date
a.	Yes	Yes
b.	No	Yes
c.	Yes	No
d.	No	No

TOA 13-23 (AICPA)

A company uses the percentage of completion method to account for 4-year construction contract. Which of the following should be used in the calculation of the income recognized in the first year?

	Progress billings	Collection on progress billings
a.	Yes	Yes
b.	Yes	No
c.	No	No
d.	No	Yes

TOA 13-24 (AICPA)

Which of the following would be used in the calculation of the income recognized in the third and final year of a construction contract which is accounted for using the percentage of completion method?

	Contract price	Actual total costs	Income previously recognized
a.	Yes	Yes	No
b.	Yes	Yes	Yes
c.	Yes	No	Yes
d.	No	No	Yes

TOA 13-25 (Adapted)

Which of the following is/are recognized each period under the cost recovery method?

a. Costs only
b. Revenue only
c. Both costs and revenues
d. None of these

TOA 13-26 (Adapted)

Under the cost recovery method (point in time)

a. Revenue, cost, and gross profit are recognized during the production cycle.
b. Revenue and cost are recognized during the production cycle, but gross profit recognition is deferred until the contract is completed.
c. Revenue, cost, and gross profit are recognized at the time the contract is completed.
d. None of these

TOA 13-27 (Adapted)

The major advantage of the cost recovery method (point in time) over the percentage of completion (over time) is

a. It is not necessary to recognize revenue at the point of sale.
b. Reported revenue is based on final results rather than estimates of unperformed work.
c. A greater amount of gross profit and net income is reported than when the percentage of completion is used.
d. It reflects current performance when the period of a contract extends into more than one accounting period.

TOA 13-28 (Adapted)

During 2020, Lynx Co. began construction of a project scheduled for completion in 2022. At December 31, 2020, an overall loss was anticipated at contract completion. What would be the effect of the project in 2020 operating income under the percentage of completion method and the zero profit method.?

Percentage of completion	Zero Profit

a.	No effect	No effect
b.	No effect	Decrease
c.	Decrease	No effect
d.	Decrease	Decrease

TOA 13-29 (Adapted)

Which of the following statement is incorrect with respect to revenue recognition of construction contracts?

a. The percentage of completion method is to be applied for fixed price contracts if the recognition criteria are satisfied.
b. The standard requires individual construction contracts to be accounted for separately and the requirements of the standard to be applied separately to each contract.
c. The percentage of completion method should be used, provided certain conditions are met that enable the outcome of the contract to be reliably measured.
d. Percentage of completion method requires contract revenue to be matched with progress billings, resulting in the reporting of revenue, expenses and profit which can be attributed to the amount billed to customers.

TOA 13-30 (Adapted)

A variation in a construction contract is

a. An instruction by the customer for a change in the scope of work to be performed under the contract.
b. An amount that the contractor seeks to collect from the customer as reimbursement for cost not included in the contract.
c. An additional amount paid to the contractor if specified performance standards are met.
d. The initial amount of revenue agreed in the contract.

TOA 13-31 (IFRS)

The Donovan Co. is nearing completion of a construction contract. The work has not gone to plan due to the issues outlined below:

1. The client has requested a variation in the contract by requiring new security devices to be fitted, at an additional cost to Donovan of P1,000,000. The client has accepted responsibility for these additional costs even though they were not originally agreed.
2. Donovan has carried out additional work on the contract as there had been building errors. This cost P2,500,000 and the client refuses to accept responsibility.

According to IFRS 15, which, if either, of the above issues should be included in contract revenue?

a. Neither issue
b. Issue (1) only
c. Issue (2) only
d. Both issue (1) and issue (2)

TOA 13-32 (Adapted)

When it is probable that total contract costs on a fixed price contract will exceed total contract revenue, the expected loss should be

a. Set off against profits on other contracts where available.
b. Recognized as an expense immediately, unless revenue to date exceed costs to date.
c. Apportioned to the years of the contract according to the stage of completion method.
d. Recognized as an expense immediately

TOA 13-33 (Adapted)

The carrying amount of contract costs relating to a performance obligation and recognized as an asset is P1,200,000. In order to satisfy the obligation, it requires further costs estimated at P300,000. When the obligation is satisfied, the company expects to receive a consideration in the amount of P1,320,000. What is the amount of impairment loss (if any) which should be deducted from the contract asset and recognized as an expense?

a. 0
b. 180,000
c. 300,000
d. 420,000

TOA 13-34 (SME)

IFRS/PFRS for SMEs, Section 23, *Revenue*, provides the conditions that when a contract covers a number of assets, the construction of each assets shall be treated as a separate construction contract, except

a. Separate proposal have been submitted for each asset.
b. The price of the asset is negotiated without regard to the original contract price.
c. The cost and revenue of each asset are separately identifiable.
d. Each asset has been subject to separate negotiation and both contractors and customer were able to accept or reject that part of the contract relating to each asset.

TOA 13-35 (SME)

According to IFRS/PFRS for SMEs, Section 23, *Revenue*, when the outcome of a construction contract cannot be estimated reliably, it should recognize revenue

a. By recording an equal amount of revenue for each work performed.
b. By using the percentage of completion method based on costs incurred compared to total estimated costs.
c. Straight line over the life of the construction contract.
d. Only to the extent of the expenses recoverable.

MULTIPLE CHOICE - Problems

PROB. 13-1 (Adapted)

The Thing Co. has just completed a 4-year contract to which the following relate:

Labor and materials costs	1,800,000
Machinery cost	600,000
Initial design costs	100,000
Disposal proceeds of machinery	50,000

According to IFRS 15, what are the total contract costs?

a. 2,350,000
b. 1,900,000
c. 2,450,000
d. 2,500,000

PROB. 13-2 (RPCPA)

Black Builders Co. is a construction firm that uses the percentage of completion method of recognizing income. On August 2, 2019, a contract to build an office condominium was obtained at a price of P8,700,000. Below are the data pertaining to this contract:

	2019	2020
Estimated cost at completion	P6,525,000	P6,960,000
Cumulative income recognized	435,000	1,044,000
Percentage of completion	15%	65%

Based on the above information, what is the amount cost of contract incurred during the year ended December 31, 2020?

a. 3,741,000
b. 4,611,000
c. 4,176,000
d. 3,545,250

PROB. 13-3 (AICPA)

On May 1, 2019, Green Construction Co. entered into a fixed price contract to construct an apartment building for P3,000,000. Green appropriately accounts for this contract under the percentage of completion method. Information relating to the contract is as follows:

At December 31:	2019	2020
Percentage of completion	20%	60%
Estimated cost at completion	P2,250,000	P2,400,000
Income recognized (cumulative)	150,000	360,000

What is the amount of contract cost incurred during the year ended December 31, 2020?

a. 600,000
b. 960,000
c. 990,000
d. 1,440,000

PROB. 13-4 (Adapted)

Atlas Construction Co. has used the cost-to-cost percentage method of recognizing revenue. The following incomplete records were provided for a recently completed building project.

	2019	2020	2021
Contract price	P20,000,000		
Gross profit (loss)	400,000	P 1,400,000	P (200,000)
Cost incurred	3,600,000	?	8,200,000

a. How much cost was incurred in 2020?
   a. 18,400,000
   b. 11,800,000
   c. 6,600,000
   d. 1,600,000

b. What percentage (rounded) of the project was completed by the end of 2020?
   a. 55%
   b. 60%
   c. 65%
   d. 70%

c. What was the estimated cost to complete the project at the end of 2020?
   a. 3,060,000
   b. 6,800,000
   c. 8,200,000
   d. 9,800,000

PROB. 13-5 (AICPA)

High Rise Corp. has entered into a very profitable fixed-price contract for constructing a condominium building over a period of three years, with a total estimated cost of P18 million. It incurs the following costs relating to the contract during the first year of construction:

Materials	P 2.5 million
Site labor costs	2.0 million
Agreed administration costs as per contract to be reimbursed by the customer	1.0 million
Depreciation of the plant used for the construction	0.5 million
Marketing costs for selling condo units when they are ready for occupancy	1.0 million

What is the percentage of completion of this contract?
a. 33 1/3%
b. 27%
c. 25%
d. 39%

PROB. 13-6 (AICPA)

Cord Builders, Inc. has consistently used the percentage of completion method of accounting for construction type contracts. During 2019, Cord started work on a P9,000,000 fixed price construction contract that was completed in 2021. Cord's accounting records disclosed the following:

	December 31	
	2019	2020
Cumulative contract costs incurred	P3,900,000	P6,300,000
Estimated total cost at completion	7,800,000	8,100,000

How much income would Cord have recognized on this contract for the year ended December 31, 2020?

a. 100,000
b. 300,000
c. 600,000
d. 700,000

PROB. 13-7 (AICPA)

Mill Construction Co. uses the percentage of completion method of accounting. During 2020, Mill contracted to build an apartment complex for Drew for P20,000,000. Mill estimated that total costs would amount to P16,000,000 over the period of construction. In connection with this contract, Mill incurred P2,000,000 of construction cost during 2020. Mill billed and collected P3,000,000 from Drew in 2020. What amount should Mill recognize as gross profit for 2020?

a. 250,000
b. 375,000
c. 500,000
d. 600,000

PROB. 13-8 (AICPA)

The following data relate to a construction job started by Worthington Co. during 2020:

Total contract price	P 300,000
Actual costs incurred during 2020	60,000
Estimated remaining costs	120,000

Billed to customer during 2020	90,000
Received from customer during 2020	30,000

Under the percentage of completion method, how much should Worthington recognize as gross profit for 2020?

a. 0
b. 40,000
c. 80,000
d. 100,000

PROB. 13-9 (AICPA)

Excellent Co., a construction company, uses the percentage of completion method. In 2019, Excellent began work on a contract to construct an office building for P1,100,000 and it was completed in 2020. Data on the cost are:

	12/31/2019	12/31/2020
Cost incurred	390,000	280,000
Estimated cost to complete	260,000	

For the years 2019 and 2020, Excellent should recognize gross profit of

	2019	2020
a.	0	430,000
b.	258,000	172,000
c.	270,000	160,000
d.	270,000	430,000

PROB. 13-10 (AICPA)

Adams Construction Co. uses the percentage of completion method of accounting. During 2020, Adams contracted to build an apartment house for Roper for P10,000,000. Adams estimated that total costs would amount to P8,000,000 over the period of construction. In connection with this contract, Adams incurred P1,000,000 of construction costs during 2020. Adams billed and collected P1,500,000 from Roper in 2020. How much gross profit should Adams recognize in 2020?

a. 300,000
b. 250,000
c. 187,500

d. 125,000

PROB. 13-11 (Adapted)

On January 3, 2020, Erectors, Inc. enters into a contract to construct a dam for P80,000,000. Erectors uses the cost-to-cost method to determine the percentage completed. During the construction period, the original contract was modified that eventually changed the provision of the contract. The following schedule summarizes these changes made in 2020:

	Cost Incurred (2020)	Estimated Cost to Complete	Contract Price
Original contract	P16,000,000	P50,050,000	P 80,000,000
Change order No. 1	100,000	100,000	250,000
Change order No. 2	-	100,000	-
Change order No. 3	600,000	600,000	Negotiable (at least cost)
Change order No. 4	250,000	-	200,000

a. What is the percentage of completion for this project in 2020?
   a. 21%
   b. 23%
   c. 25%
   d. 30%

b. What is the amount of estimated gross profit that will be recognized in 2020?
   a. 1,450,000
   b. 1,829,500
   c. 3,050,000
   d. 3,462,500

PROB. 13-12 (AICPA)

The following data pertains to Pell Co.'s construction jobs, which commenced during 2020:

	Project 1	Project 2
Contract price	P 420,000	P 300,000
Cost incurred during 2020	240,000	280,000
Estimated cost to complete	120,000	40,000
Billed to customers during 2020	150,000	270,000
Received from customers during 2020	90,000	250,000

If Pell used the percentage of completion method, what amount of gross profit (loss) would Pell report in its 2020 income statement?

a. (20,000)
b. 20,000
c. 22,500
d. 40,000

PROB. 13-13 (RPCPA)

The Gamboa Construction Co. started work on three job sites during the current year. Data relating to the three jobs are given below:

Site	Contract price	Cost incurred	Estd. cost to complete	Billings on contract	Collec-tions
Batangas	500,000	375,000	0	500,000	400,000
Laguna	700,000	100,000	400,000	100,000	50,000
Sn Fernando	250,000	100,000	100,000	0	0

a. What amount of income should be reported for the current year if the percentage of completion method is used for all contracts?
   a. 65,000
   b. 190,000
   c. 215,000
   d. 240,000

b. What would be the amount of Construction in Progress to be reported on the balance sheet if the percentage of completion method is used?
   a. 165,000
   b. 265,000

c. 575,000
d. 765,000

PROB. 13-14 (AICPA)

C & J Construction, Inc. consistently used the percentage of completion method of recognizing income. Last year C & J started work on a P4,500,000 construction contract, which was completed this year. The accounting records disclosed the following data for last year:

Progress billings	P 1,650,000
Cost incurred	1,350,000
Collections	1,050,000
Estimated cost to complete	2,700,000

How much revenue should C & J recognize on this contract last year?

a. 105,000
b. 150,000
c. 300,000
d. 350,000

PROB. 13-15 (Adapted)

The Fix It Construction Co. was the low bidder on an express way contract along Kennon Road. The contract bid was P200,000,000. Fix it estimates that it will take 36 months from 2020 to complete the project. The contract provided for the following:

- 5% mobilization fee payable within 10 days from the signing of the contract.
- As a protection for the national government, 10% of the progress billings will be retained and is paid upon final acceptance of the construction.
- Progress billings will be paid within 7 days from acceptance date.

Fix It estimates a P50,000,000 gross profit from the project and appropriately uses the percentage of completion method of accounting. By the end of 2020, Fix It billed the national government corresponding to 50% completion of the project. The national government accepted all the bills presented, except one for

10% which was accepted on January of the following year. With the exception of an 8% billings accepted which was due January of the following year, all accepted billings were settled.

a. What is the amount of profit realized from the project in 2020?
   a. 50,000,000
   b. 25,000,000
   c. 20,000,000
   d. 15,000,000

b. What is the total amount of cash collected by Fix It from this project in 2020?
   a. 90,000,000
   b. 80,000,000
   c. 77,000,000
   d. 92,800,000

PROB. 13-16 (AICPA)

State Co. recognizes revenue and expenses using the percentage of completion method. During 2019, a single long-term project was begun, which continued through 2020. Information on the project follows:

	2019	2020
Receivable from construction contract	P100,000	P300,000
Construction expenses	105,000	192,000
Construction in progress	122,000	364,000
Partial billings on contract	100,000	420,000

Profit recognized from the long-term construction contract in 2020 should be
a. 50,000
b. 108,000
c. 128,000
d. 228,000

PROB. 13-17 (AICPA)

Shepard Construction Co. has consistently used the percentage of completion method. On January 10, 2019, Shepard began work on a P3,000,000 construction contract. At the inception date, the estimated cost of construction was P2,250,000. The following data relate to the progress of the contract.

Income recognized at December 31, 2019	P 300,000
Cost incurred, January 10, 2019 through Dec. 31, 2020	1,800,000
Estimated cost to complete at December 31, 2020	600,000

How much income should Shepard recognize for the year ended December 31, 2020?

a. 150,000
b. 262,500
c. 300,000
d. 450,000

PROB. 13-18 (AICPA)

Jessup Construction, Inc. has consistently used the percentage of completion method of recognizing income. During 2020, Jessup started work on a P1,500,000 fixed-price construction contract. The accounting records disclosed the following data for the year ended December 31, 2020:

Cost incurred	P 465,000
Estimated cost to complete	1,085,000
Progress billings	550,000
Collections	350,000

How much loss should Jessup have recognized in 2020?

a. 15,000
b. 35,000
c. 50,000
d. 115,000

PROB. 13-19 (Adapted)

A Turn-Key contract was perfected between Built-In Builders and a customer for a contract price of P1,200,000. The estimated cost at the time the contract is signed on January 25, 2020 is P944,000. At December 31, 2020, the total cost incurred is P590,000 with an estimated cost to complete of P410,000. Built-In billed the customer in the amount of P70,000 and has received P60,000.

a. Using the percentage of completion method, what is the amount of estimated gross profit that should be recognized in 2020?
   a. 0
   b. 118,000
   c. 125,000
   d. 200,000

b. Using the percentage of completion method, what is the balance of construction in progress account that should be presented at December 31, 2020 balance sheet?
   a. 410,000
   b. 590,000
   c. 708,000
   d. 944,000

PROB. 13-20 (AICPA)

In 2020, Aldaus Corp. began construction work under a three-year contract. The contract price is P8,000,000. Aldaus used the percentage of completion method for financial accounting purposes. The income to be recognized each year is based on the proportion of the cost incurred to total estimated costs for completing the contract. The financial presentations relating to this contract at December 31, 2020, appear below:

Balance Sheet		
Receivable - construction contract billings		P 150,000
Construction in progress	P 500,000	
Less contract billings	470,000	
Cost of uncompleted contract in excess of billings		30,000
Income Statement		
Income (before tax) on the contract recognized in Year 1		P 100,000

How much cash was collected in 2020 on this contract?

a. 320,000

b. 350,000
c. 470,000
d. 500,000

PROB. 13-21 (AICPA)

Lake Construction Co. uses the percentage of completion method for long-term construction contracts. The company has a project with a contract price of P7,000,000, on which P600,000 of gross profit has been recognized in prior years. Information for the current is as follows:

Total cost incurred through current year	P 5,000,000
Estimated cost remaining at the end of current year	2,800,000

What is the loss that Lake should recognize in the current year?

a. 600,000
b. 800,000
c. 1,400,000
d. 0

PROB. 13-22 (AICPA)

Land Construction Co. has consistently used the percentage of completion method of recognizing income. During 2018, Land started work on a P7,500,000 fixed-price construction contract, which was completed in 2021. The accounting records disclosed the following data:

	Cumulative contract costs incurred	Estimated costs at completion
At December 31, 2018	500,000	5,000,000
At December 31, 2019	2,750,000	5,500,000
At December 31, 2020	5,000,000	6,000,000

How much income should Land have recognized on this contract for the year ended December 31, 2020?

a. 250,000
b. 416,667
c. 500,000

d. 562,500

PROB. 13- 23 (Author)

On January 1, 2021, an entity accepted a long-term construction project for an initial contract price of P1,000,000 to be completed on June 30, 2023. On January 1, 2022, the contract price was increased to P1,500,000 by reason of change in the design of the project. The project was completed on December 31, 2023 which resulted to penalty amounting to P200,000. The outcome of the construction contract can be estimated reliably.

The entity provided the following data concerning the direct costs related to the said project:

	Year 2021	Year 2022	Year 2023
Costs during the year	440,000	680,000	130,000
Remaining estimated costs to complete at the end of the year	660,000	280,000	-

a. What is the construction revenue to be recognized by the entity for the year ended December 31, 2021?
   a. 340,000
   b. 400,000
   c. 440,000
   d. 360,000

b. What is the realized gross profit (gross loss) to be recognized by the entity for the year ended December 31, 2022?
   a. 200,000
   b. 80,000
   c. 180,000
   d. (20,000)

c. What is the balance of construction in progress on December 31, 2022?
   a. 1,200,000
   b. 900,000

c. 1,120,000
d. 1,020,000

d. What is the realized gross profit (gross loss) to be recognized by the entity for the year ended December 31, 2023?
   a. 50,000
   b. (30,000)
   c. 170,000
   d. (120,000)

PROB. 13-24 (Adapted)

In 2020, Erector Construction Co. started construction of a building with a contract price of P100,000,000 and estimated total costs of P90,000,000. In 2020, Erector incurred construction cost in the amount of P54,000,000. Using the zero profit method of accounting, what is the amount of revenue to be recognized in 2020?
a. 90,000,000
b. 60,000,000
c. 54,000,000
d. 6,000,000

PROB. 13-25 (Author)

On January 1, 2018, an entity started the construction of a building at a fixed contract price of P1,000,000. On the same date, the customer paid a mobilization fee equal to 5% of contract price that will be deductible from the first billing.

On 2018, the entity billed its customer equivalent to 30% of the contract price. On 2019, the entity billed again its customer amounting to 20% of the contract price. On 2020, the entity billed again its customer amounting to 40% of the contract price. The remaining billing was made at the year of completion of the project.

The entity made collection from the customer at the end of year 2018, 2019 and 2020, in the amount of P120,000, P450,000 and P180,000, respectively. The outcome of construction contract cannot be estimated reliably.

The entity provided the following data concerning the direct costs related to the said project:

	Year 2018	Year 2019	Year 2020
Cumulative costs incurred as of the end of the year	360,000	800,000	870,000
Remaining estimated costs to complete at the end of the year	840,000	250,000	50,000

a. What is the realized gross profit (loss) for the year ended December 31, 2019?
   a. (50,000)
   b. (200,000)
   c. 150,000
   d. 0

b. What is the excess of construction in progress over progress billings (progress billings over construction in progress) on December 31, 2020?
   a. (30,000)
   b. (80,000)
   c. 20,000
   d. 50,000

c. What is the balance of accounts receivable on December 31, 2020?
   a. 150,000
   b. 100,000
   c. 50,000
   d. 120,000

PROB. 13-26 (Adapted)

The Tiger Co. has entered into a 5-year fixed price construction contract to build a factory. The contract value is P20,000,000 and the estimated costs are P16,000,000. At the end of the first year, Tiger can estimate the outcome of the contract reliably. It has received cash payments to the value of P8,600,000 and incurred costs of P6,000,000. At the end of the first year, what amount should be recognized as revenue in the financial statements?

a. 3,200,000
b. 7,500,000
c. 6,000,000
d. 8,600,000

PROB. 13-27 (RPCPA)

Ramos Builders, Inc. entered into a P10,000,000 contract to construct a multi-purpose recreational facility. The estimated cost to complete the project was P8,000,000 and the contract period was 36 months starting January 1, 2019. The company uses the cost-to-cost method of estimating earnings. On January 1, 2020, the contract price was reduced to P9,500,000 due to many changes made to the original contract. The accounting records relating to this contract for the years 2019 to 2021 disclosed the following:

	Actual Cost Current Year	Estd. Cost to Complete	Progress Billings
2019	P 3,000,000	P 5,000,000	P2,800,000
2020	3,500,000	1,600,000	4,000,000
2021	1,700,000	-	2,700,000

Under the percentage of completion method of recognizing revenue,

a. What was the total estimated gross profit recognized as of December 31, 2020?
   a. 1,123,750
   b. 1,419,850
   c. 1,525,000
   d. Answer not given

b. What was the estimated gross profit (loss) recognized for the year ended December 31, 2021?
   a. 232,560

b. (119,850)
c. 176,250
d. Answer not given

PROB. 13-28 (AICPA)

Build-It Corp. is constructing a building and has signed a fixed-price two-year contract for P21 million. It has incurred the following cost relating to the contract by the end of first year:

Materials	P 5.0 million
Labor	2.0 million
Construction overhead	2.0 million
Marketing	0.5 million
Depreciation of idle plant and equipment	0.5 million

At the end of Year-1, it has estimated cost to complete the contract at P9 million. What profit or loss from the contract should Build-It recognize at the end of Year-1?

a. 1.5 million
b. 1.0 million
c. 1.05 million
d. 1.28 million

PROB. 13-29 (IFRS)

The Pine Co. is attempting to determine the total revenue on a contract to build a factory for the Aster Co. All calculations are in accordance with IAS 11, Construction Contracts, and Pine Co. has identified the following:

Initially agreed fixed contract	800,000
Variation in the contract (Note 1)	100,000
Penalty (Note 2)	30,000

Note 1: During the contract, Aster changed the specification of the air conditioning systems. The changed specification has been agreed but a new contract with the new price has not yet been signed, although

an increase in the contract price of around P100,000 is highly probable.

Note 2: A strike at Pine caused a delay for which the penalty in the original contract was P30,000. This was agreed by both parties.

At what amount should the total contract revenue be stated?

a. 770,000
b. 900,000
c. 800,000
d. 870,000

ANSWERS – Theory of Accounts

TOA 13-1 *Suggested answer (a) Combined and treated as a single contract*

According to IFRS 15.17, an entity shall combine two or more contracts entered into at or near the same time with the same customer (or related parties of the customer) and account for the contracts as a single contract if one or more of the following criteria are met.

1. *The contracts are negotiated as a package with a single commercial objective.*
2. *The amount of consideration to be paid in one contract depends on the price or performance of the other contract; or*
3. *The goods or services promised in the contracts (or some goods or services promised in each of the contracts) are a single performance obligation in accordance with paragraphs 22-30.*

TOA 13-2 *Suggested answer (d) a large boat being constructed for a third party under a specifically negotiated contract*

IFRS 15.95 provides that if the cost incurred in fulfilling a contract with a customer are not within the scope of another standard (e.g. IAS 2 Inventories, IAS 16 Property, Plant and Equipment, or IAS 38 Intangible assets), an entity shall recognize an asset from the costs incurred to fulfill a contract only if those costs meet all of the following criteria:

a. *The costs relate directly to a contract or to an anticipated contract that the entity can specifically identify.*
b. *The costs generate or enhance resources of the entity that will be used in satisfying performance obligations in the future; and*
c. *The costs are expected to be recovered.*

Accordingly, the office block and the warehouse should be accounted under IAS 16, Property, Plant and Equipment. While plant and machinery should be accounted under IAS 2, Inventory. While the boat would be a construction contract as it is being built under a specifically negotiated contract.

TOA 13-3 *Suggested answer (c)*

Billings on contracts in progress is presented in the Statement of Financial Position as a deduction from Construction in Progress account, not from accounts receivable.

TOA 13-4 *Suggested answer (a) March 20, 2020 to December 30, 2020*

IFRS 15 introduces guidance on how to account for costs associated with a customer by distinguishing between costs of obtaining a contract, and costs of fulfilling a contract. The costs of obtaining a contract are those that an entity incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained. While, the costs of fulfilling a contract are those costs that relate directly to a contract or an anticipated contract that an entity can specifically identify, costs that generate or enhance resources of the entity that will be used in satisfying performance obligations in the future, and costs that are expected to be recovered. These costs are to accumulate over the period from securing the contract to final completion of the contract.

TOA 13-5 *Suggested answer (c) Net, as a current asset if debit balance and current liability if credit balance.*

Accounting standards for construction contracts requires that the difference between construction in progress (costs and recognized income) and progress billings to date be shown as a current asset if construction in progress exceeds total billings, and as current liability is billings exceed construction in progress. Separate recognition is required for each project.

TOA 13-6 *Suggested answer (d)*

Recognition of revenue over time demonstrates that an entity is transferring control of goods or services over time that is satisfying performance obligation over time.

TOA 13-7 *Suggested answer (b) Methods 1 and 3*

The stage of completion of a transaction may be determined by a variety of methods. An entity uses the method that measures reliably the services performed. Depending on the nature of the transaction, the methods may include:

1. *Surveys of work performed.*

2. *Services performed to date as a percentage of total services to be performed; or*
3. *The proportion that costs incurred to date bear to the estimated total costs of the transaction. Only costs that reflect services performed to date are included in costs incurred to date. Only costs that reflect services performed or to be performed are included in the estimated total costs of the transaction.*

TOA 13-8 *Suggested answer (c)*

Where the outcome of a construction contract cannot be estimated reliably or where the stage of completion cannot be reliably assessed, ***costs incurred on the contract are to be recognized as expense and revenue is to be recognized only to the extent that the cost incurred are recoverable.***

TOA 13-9 *Suggested answer (d)*

An entity recognizes revenue over time only if it can reasonably measure its progress toward complete satisfaction of the performance obligation. However, if the entity cannot reasonably measure the outcome but expects to recover the costs incurred in satisfying the performance obligation, then it recognizes revenue to the extent of the cost incurred that are recoverable.

TOA 13-10 *Suggested answer (c) The initial amount of revenue agreed in the contract, variation in contract work, claim and incentive payment.*

Contract revenue is the total amount of consideration receivable under the contract. It includes revenue due from the originally agreed contract and from any subsequent changes (variations)in the contract provided that they have been agreed (i.e. the amounts are known and are recoverable).

In the early stages of a contract, the contract revenue will often be an estimate of what the final amount will be, as it may be dependent on the outcome of future events. Contract revenue may alter where it is possible for the contractor to make claims against the customer, or a third party, for costs that were not originally included in the contract.

TOA 13-11 *Suggested answer (c) The amount of revenue may increase as a result of penalties arising from delays caused by contractor in the completion of the contract.*

Penalties arising from delays caused by the contractor will reduce the revenue.

TOA 13-12 *Suggested answer (b) As progress is made toward completion of the contract.*

There are two methods used for revenue recognition for long-term construction contracts: 1.) the percentage of completion method/revenue recognition over time, and 2.) the zero profit method/cost recovery method. Under the percentage of completion method, revenues and gross profit are recognized each period based upon the progress of the construction. The presumption is that the percentage of completion approach shall be used when the outcome of a construction contract can be estimated reliably; while the zero profit method shall be used only when the outcome of the contract cannot be estimated reliably.

TOA 13-13 *Suggested answer (d) Cost (1), (2), and (3)*

According to IFRS 15, contract costs should include the costs that directly relate to a contract, for example, costs of materials used in the construction, site labor costs, the cost of hiring equipment and depreciation of equipment used in the contract. In addition, contract costs will include an allocation of costs incurred to carry out contract activity in general, for example, insurance and construction overhead. If other costs are identified as being specifically recoverable under a particular contract, these should also form part of the construction costs of that contract.

TOA 13-14 *Suggested answer (d) General administration costs for which reimbursement is not specified in the contract.*

According to IFRS 15.98, an entity shall recognize the following costs as expense when incurred:

a. *General and administrative costs unless they are explicitly chargeable to the customer under the contract;*
b. *Costs of wasted materials, labor or other resources to fulfill the contract that were not reflected in the price of the contract;*
c. *Costs that relate to satisfied performance obligation (or partially satisfied performance obligations) in the contract; and*
d. *Costs for which an entity cannot distinguish whether the cost relate to unsatisfied or satisfied performance obligation (or partially satisfied performance obligations).*

TOA 13-15 *Suggested answer (c)*

If the cost incurred in fulfilling a contract with a customer are not in the scope of other standards (e.g. IAS 2, IAS 16, IAS 38), an entity recognizes an asset only if the fulfillment costs meet the following criteria:

1. *Directly related to an existing contract or specific anticipated contract.*
2. *Generate or enhance resources that will be used to satisfy performance obligations in the future.*
3. *Expected to be recovered.*

TOA 13-16 *Suggested answer (d) Cost-to-cost basis*

There are two categories to measure the extent of progress toward completion under the percentage of completion, namely: input measures, and output measures. Input measures are made in relation to the costs or efforts devoted to a contract. They include the widely used cost-to-cost method, which is based on the assumed relationship between a unit of input and productivity. Under this method, the degree of completion is determined by comparing costs already incurred with the most recent estimates of total expected costs to complete the project.

TOA 13-17 *Suggested answer (a) Contra current asset account*

In construction industry, operating cycles for construction contracts generally exceed one year. Therefore, the predominant practice is to classify all contract-related assets and liabilities as current. On the balance sheet, the construction in progress (CIP) account is netted with the contra account,

progress billings. If CIP exceeds billings, the excess is reported as a current asset. If billings exceed CIP, the excess is reported as a current liability.

TOA 13-18 *Suggested answer (d)*

In order to apply the percentage of completion method/revenue recognition over time, ***the firm must have some basis or standard for measuring the progress towards completion at particular interim dates****, such as the input method or the output method.*

TOA 13-19 *Suggested answer (d)*

The percentage of completion method can be used for a fixed-price contract when all of the following conditions are satisfied:

1. *Total contract revenue can be measured reliably.*
2. *It is probable that the economic benefits associated with the contract will flow to the entity.*
3. *Both contract costs to complete the contract and the stage of contract completion at the end of the reporting period can be measured reliably.*
4. *The contract costs attributed to the contract can be clearly identified and measured reliably so that actual costs incurred can be compared with prior estimates.*

TOA 13-20 *Suggested answer (a) Total costs incurred to date to total estimated costs.*

Under the percentage of completion of measuring progress using cost-to-cost method, the degree of completion is determined by comparing costs already incurred with the most recent estimates of total expected costs to complete the project.

TOA 13-21 *Suggested answer (d) Progress payments and advances received from customers.*

Under the percentage of completion method, revenue and expenses are recognized to the extent that construction has progress. Progress payments and advances received from customers do not reflect the work performed.

TOA 13-22 *Suggested answer (c) Yes, No*

The percentage of completion method provides for the recognition of income based on the relationship between the costs incurred to date and estimated total costs for the completion of the contract.

The amount of income (based on the latest available estimated costs) recognized in the second year of a 4-year contract is calculated as follows: the total anticipated income is multiplied by the ratio of the costs incurred to date to the total estimated costs, and the product is reduced by previously recognized income. Income previously recognized is therefore used to calculate income to be recognized in the second year. However, progress billings to date have no effect on the amount of income to be recognized in the second year.

TOA 13-23 *Suggested answer (c) No, No*

Revenue recognition principles permit revenue to be recognized when it is realized or realizable and earned. For long-term construction contracts, these criteria are met in accordance with either the percentage of completion or the cost recovery method. Neither the issuance of progress billings nor the collections of cash results in recognition of income.

TOA 13-24 *Suggested answer (b) Yes, Yes, Yes*

Contract price is the revenue in the construction contract. In the final year of a contract accounted by the percentage of completion method, the percentage of completion is 100%, since the costs to date equal total costs. Therefore, to calculate the current income, income previously recognized should be deducted from the total actual income, which is the contract price less the actual total costs.

TOA 13-25 *Suggested answer (c) Both costs and revenues*

Under the cost recovery method, revenue and cost are recognized during the production, but gross profit is deferred until all costs are incurred.

TOA 13-26 *Suggested answer (c)*

The cost recovery method recognizes revenue at a point in time by recognizing total revenue, total costs, and total gross profit at the completion of the contract.

TOA 13-27 *Suggested answer (b)*

The cost recovery method recognized revenuer at a point in time when control of goods or services is already transferred to the customer; where as the percentage of completion recognized revenue by reference to the estimated stage of completion by determining a measure of progress.

The percentage of completion (over time) shall be used when the outcome of the construction contract can be estimated reliably; whereas the cost recovery method (point in time) shall be used only when the outcome of the contract cannot be estimated reliably; thus revenue is recognized based on final results.

TOA 13-28 *Suggested answer (d) Decrease, Decrease*

When the current estimate to total contract costs indicates a loss, an immediate provision for the entire loss should be made regardless of method. Thus, under either method, 2020 operating income is decreased by the projected loss.

TOA 13-29 *Suggested answer (d)*

Accounting standards states that under the percentage of completion method, contract revenue is matched with the contract cost incurred in reaching stage of completion, resulting in the reporting of revenue, expenses and profit which can be attributed to the proportion of work completed.

TOA 13-30 *Suggested answer (a) An instruction by the customer for a change in the scope of work to be performed under the contract.*

A variation is an instruction by the customer for a change in the scope of the work to be performed under the contract. It may lead to an increase or decrease in contract revenue. Examples of variation include changes in the specifications or design of an asset and changes in the duration of contract.

TOA 13-31 *Suggested answer (b) Issue (1) only*

In case of variation in the contract, the standard provides that claims can only be included as contract revenue when it is probable that the client will accept them.

TOA 13-32 *Suggested answer (d) Recognized as an expense immediately*

Where the revenue and costs in a contract have been assessed and it is expected that a loss will be incurred, that loss should be recognized as an expense immediately. In other words, when a loss has been identified, there is no need to estimate the contract's stage of completion.

TOA 13-33 *Suggested answer (b) 180,000*

Consideration receivable	P 1,320,000
Less Further cost required	300,000
Recoverable amount	1,020,000
Less Contract asset	1,200,000
Impairment loss	P 180,000

An entity recognizes an impairment loss to the extent that the carrying value of the asset exceeds the recoverable amount. The recoverable amount is the remaining expected amount of consideration to be received in exchange for the goods or services to which the asset relates less costs that relate directly to provide those goods or services and that have not been recognized as expense.

TOA 13-34 *Suggested answer (b)*

***The price of the asset is negotiated without regard to the original contract price** (b) is applicable to full IFRS/PFRS, but not to FRS/PFRS for SMEs. when the construction of the additional asset shall be treated as a separate construction contract.*

TOA 13-35 *Suggested answer (d)*

Similar with PAS/IAS 11, Construction Contracts, the IFRS/PFRS for SMEs. Section 23, Revenue, provides that when the outcome of the construction contract cannot be estimated reliably:

- *An entity shall recognize revenue* ***only to the extent of contract costs incurred that it is probable will be recoverable****; and*
- *The entity shall recognize contract costs as an expense in the period in which they are incurred.*

SOLUTIONS - Problems

PROB. 13-1 *Suggested answer (c) 2,450,000*

Labor and materials costs	1,800,000
Machinery costs	600,000
Initial design costs	100,000
Disposal proceeds of machinery	(50,000)
Total contract costs	2,450,000

Again, according to IFRS 15, if the cost incurred in fulfilling a contract with a customer are not within the scope of another standard (e.g. IAS 2 Inventories, IAS 16 Property, Plant and Equipment, or IAS 38 Intangible assets), an entity shall recognize an asset from the costs incurred to fulfill a contract only if those costs meet all of the following criteria:

a. The costs relate directly to a contract or to an anticipated contract that the entity can specifically identify.
b. The costs generate or enhance resources of the entity that will be used in satisfying performance obligations in the future; and
c. The costs are expected to be recovered.

PROB. 13-2 *Suggested answer* (d) P3,545,250

Estimated cost incurred, December 31, 2020 (P6,960,000 x 65%)	4,524,000
Less estimated cost incurred, December 31, 2019 (P6,525,000 x 15%)	978,750
Cost of contract incurred for 2020	3,545,250

The percentage of completion may be computed by dividing the cost incurred to date by the total estimated cost; hence to compute for the cost incurred to date, the total estimated cost must be multiplied by the percentage of completion. And the difference between the cost incurred as of two given periods represents the cost incurred at a given period.

PROB. 13-3 *Suggested answer* (c) P990,000

Cost incurred as of December 31, 2020 (60% x P2,400,000)	1,440,000
Less cost incurred as of December 31, 2019 (20% x P2,250,000)	450,000
Contract cost incurred during 2020	990,000

Again, the percentage of completion may be computed by dividing the cost incurred to date by the total estimated cost; hence to compute for the cost incurred to date, the total estimated cost must be multiplied by the percentage of completion. And the difference between the cost incurred as of two given periods represents the cost incurred at a given period.

PROB. 13-4

a. *Suggested answer* (c) P6,600,000

Contract price	P20,000,000
Less gross profit recognized on contract (P400,000 + 1,400,000 - 200,000)	1,600,000
Total cost incurred on contract	18,400,000
Less cost incurred in 2019 and 2021 (P3,600,000 + 8,200,000)	11,800,000
Cost incurred in 2020	P 6,600,000

The requirement is to determine the cost incurred in 2020. Since the information pertains to a recently completed project, the excess of contract price over the gross profit represents the total cost incurred on contract. Given the cost incurred for 2019 and 2021, the balance represents the cost incurred in 2020.

b. *Suggested answer* (b) 60%

Total cost incurred and gross profit recognized at the end of 2020:		
Cost incurred (P3,600,000 + 6,600,000)	P10,200,000	
Gross profit (400,000 + 1,400,000)	1,800,000	P12,000,000
Divide by contract price		20,000,000
Percentage of completion – end of 2020		60%

Normally, under the cost-to-cost percentage method, the degree of completion is determined by comparing costs already incurred with the most recent estimates of total expected costs to complete the project. The percentage that costs incurred bear to total expected cost is applied to the estimated net income on the project to arrive at earnings to date. This percentage may be used to determine directly the gross profit that should be recognized. Preferably, the percentage should be used to compute both revenues and costs. Note that the estimated cost to complete was not provided by the problem.

And an alternative computation in determining the percentage of completion under this method is by dividing the total costs incurred and gross profit recognized by the contract price, as shown above.

c. *Suggested answer* (b) P6,800,000

Total costs incurred, end of 2020 (b)	P10,200,000
Divide by percentage of completion	60%
Total estimated costs on contract, end of 2020	17,000,000
Less total costs incurred, end of 2020	10,200,000
Estimated cost to complete the project, end of 202	P 6,800,000

One of the most difficult problems in using the cost-to-cost percentage method is estimating the costs to be incurred. However, this estimation is required in reporting income, regardless how the percentage of completion is computed.

PROB. 13-5 *Suggested answer (a) 33 1/3%*

Materials	2.5 million
Site labor costs	2.0 million
Agreed administrative costs to be reimbursed	1.0 million
Depreciation of the plant used for the construction	0.5 million
Total cost incurred	6.0 million
Divide by total estimated cost	18 million
Percentage of completion	33 1/3%

Construction contract costs shall consist of cost that relate directly to the specific contract (e.g., materials, labor, etc.); costs that are attributable to contract activity in general and can be allocated to contracts (e.g., insurance, etc.); and other costs that are specifically chargeable under the terms of the contract (e.g., reimbursable development, general and administrative costs). Selling and marketing costs are not included in the contract costs because they cannot be attributed to contract activity nor allocated to a contract.

PROB. 13-6 *Suggested answer* (a) P100,000

	2019	2020
Contract price	P 9,000,000	P 9,000,000
Less total estimated cost	7,800,000	8,100,000
Estimated profit	1,200,000	900,000
Multiply by percentage of completion		
(3,900,000/ 7,800,000)	50%	
(6,300,000/ 8,100,000)		77.78%
Realized revenue to date	600,000	700,000
Less realized revenue in prior year(s)	-	600,000
Realized revenue in current year	P 600,000	P 100,000

Similar with the revenue recognition over time, the percentage of completion method requires recognition of contract revenue and profit as work on contract progresses based on expected total profit and estimated progress towards completion in the current period. All related costs are recognized in the period in which they occur.

PROB. 13-7 *Suggested answer* (c) P500,000

Contract price	P20,000,000
Less total estimated cost	16,000,000
Estimated revenue	4,000,000
Multiply by percentage of completion	
(2,000,000/ 16.000.000)	12.5%
Gross profit for 2020	P 500,000

Again, similar with revenue recognition overtime, percentage of completion method requires recognition of contract revenue and profit as work on contract progresses based on expected total profit and estimated progress towards completion in the current period. All related costs are recognized in the period in which they occur.

PROB. 13-8 *Suggested answer* (b) 40,000

Contract price	P 300,000
Less total estimated cost (P60,000 + 120;000)	180,000
Estimated profit	120,000
Multiply by percentage of completion [P60,000/ (60,000 + 120,000)]	33 1/3%
Gross profit to be recognized for 2020	P 40,000

The recognition of revenue by reference to the stage of completion of a contract is often referred to as the percentage of completion method. Under this method, which is similar with the revenue recognition over time under IFRS 15, contract revenue is matched with the contract costs incurred in reaching the stage of completion, resulting in the reporting of revenue, expenses and profit, which can be attributed to the proportion of work completed. Furthermore, contract revenue is recognized as revenue in the income statement in the accounting periods in which the work is performed. It is important to note that revenue and profit are two different terms. Profit is calculated by subtracting the construction expenses from revenue; and revenue is the contract price.

PROB. 13-9 *Suggested answer (c) 270,000 160,000*

	2019	2020
Contract price	1,100,000	1,100,000
Less total estimated cost (390,000+260,000)	650,000	
(390,000+280,000)		670,000
Gross profit	450,000	430,000
Multiply by percentage of completion [390,000/(390,000+260,000)]	60%	
		100%

Realized revenue to date	270,000	430,000
Less realized revenue in prior year(s)	-	270,000
Realized revenue in current year	270,000	160,000

Note that the costs incurred provided are as of a given date, therefore not cumulative. Since there is no estimated cost to complete in 2020, the project is deemed completed in 2020.

PROB. 13-10 *Suggested answer (b) 250,000*

Contract price	10,000,000
Total estimated costs	8,000,000
Total gross profit	2,000,000
Percentage of completion (1,000,000/8,000,000)	12.5%
Gross profit – 2020	250,000

The amount of gross profit to be recognized in a given period is the total estimated gross profit anticipated to be earned in that contract based on the stage of completion in that period.

PROB. 13-11

a. *Suggested answer* (c) 25%

	Cost Incurred	Estd. Cost to Complete	Total Estd. Cost
Original contract	P16,000,000	P50,050,000	P 66,050,000
Change order No. 1	100,000	100,000	200,000
Change order No. 2	-	100,000	100,000
Change order No. 3	600,000	600,000	1,200,000
Change order No. 4	250,000	-	250,000
Total	P16,950,000	P50,850,000	P 67,800,000

Total cost incurred	P16,950,000
Divide by total estimated cost	67,800,000
Percentage of completion	25%

Change orders are modifications of an original contract that effectively change the provision of the contract. If the contract price is changed as a

result of a change order, future computations are made with the revised expected revenue and any anticipated cost changes that will arise because of the change order.

b. *Suggested answer* (d) P3,462,500

Total contract price (P80,000,000 + 250,000 + 1,200,000 + 200,000)	P81,650,000
Multiply by percentage of completion	25%
Estimated gross profit	20,412,500
Less cost actually incurred in 2020 (a)	16,950,000
Gross profit to be recognized in 2020	P 3,462,500

Change orders are often unpriced, that is, the work to be performed is defined, but the adjustment to the contract price is to be negotiated later. If it is probable that a contract price change will be negotiated to at least recover the increased costs, the increased cost may be included with the incurred costs of the period and the revenue may be increased by the same amount. Thus, the cost of P1,200,000 (P600,000 + 600,000) for change order No. 3 increased the contract price by the same amount.

PROB. 13-12 *Suggested answer* (b) P20,000

	Project 1	Project 2
Contract price	P 420,000	P 300,000
Less total estimated cost		
(240,000 + 120,000)	360,000	
(280,000 + 40,000)		320,000
Estimated profit (loss)	60,000	P (20,000)
Multiply by percentage of completion [240,000/ (240,000 + 120,000)]	66 2/3%	
Realized revenue	P 40,000	

Again, the percentage of completion method requires recognition of contract revenue and profit during construction based on expected total profit and estimated progress towards completion in the current period. In any year when a percentage of completion contract has an expected loss on the entire

contract, the amount of the loss reported in that year is the total expected loss on the entire contract plus all profit previously recognized.

Note that there is no prior years' gross profit to be subtracted from P40,000, since the project commenced in 2020. Therefore, the net gross profit recognized in two projects is P20,000 (P40,000 profit - 20,000 loss).

PROB. 13-13

a. *Suggested answer* (b) P190,000

	Batangas	Laguna	Sn Fernando
Cost incurred	P375,000	P100,000	P100,000
Cost to complete	0	400,000	100,000
Total estd. cost	P375,000	P500,000	P200,000
% of completion	100%	20%	50%

	Batangas	Laguna	Sn Fernando	Total
Contract price	500,000	700,000	250,000	1,450,000
Less total Estimated cost	375,000	500,000	200,000	1,075,000
Estd. Revenue	125,000	200,000	50,000	375,000
Multiply by % of completion	100%	20%	50%	
Realized Revenue	125,000	40,000	25,000	190,000

Again, the percentage of completion method requires recognition of contract revenue and profit during construction based on expected total profit and estimated progress towards completion in the current period. All related costs are recognized in the period in which they occur.

b. *Suggested answer* (b) P265,000

	Laguna	Sn Fernando	Total

Cost incurred	P100,000	P100,000	P200,000
Realized revenue	40,000	25,000	65,000
Construction in progress	P140,000	P125,000	P265,000

Because the construction in progress account contains costs incurred and profit realized, which equals the contract price; at the completion of the contract, the balance in this account will exactly equal the amount in progress billings on construction contracts, since the progress billings account reflects the contract price. At this point (completion of the contract), these accounts will be closed; thus, Batangas site was not included in the above computations.

PROB. 13-14 *Suggested answer* (b) P150,000

Contract price	P4,500,000
Less total estimated costs (P1,350,000 + 2,700,000)	4,050,000
Estimated revenue	450,000
Multiply by percentage of completion (1,350,000/4,050,000)	33 1/3%
Realized revenue (last year)	P 150,000

Again, the percentage of completion method requires recognition of contract revenue and profit during construction based on expected total profit and estimated progress towards completion in the current period.

PROB. 13-15

a. *Suggested answer* (b) P25,000,000

Total estimated gross profit	50,000,000
Multiply by percentage of completion	50%
Realized gross profit in 2020	25,000,000

Under the percentage of completion method, a company recognizes revenues and costs on a contract as it progresses toward completion, rather than deferring recognition of these items until the contract is completed. The amount of revenue to be recognized each year is based on some measures of progress toward completion.

b. *Suggested answer* (d) P92,800,000

Mobilization fee (5% x P200,000,000)		P 10,000,000
Cash received from progress billings:		
Progress billings(50% x 200 million)	100,000,000	
Less unaccepted(10% x 100 million)	10,000,000	
Accepted billings	90,000,000	
Less unsettled (8% x 90,000,000)	7,200,000	82,800,000
Total cash received in 2020		P 92,800,000

Note that the unaccepted billing is 10% of the total billings accepted, and the unsettled is 8% of the accepted billings, thus the above computations.

PROB. 13-16 *Suggested answer* (a) 50,000

	2019	2020
Construction in progress	P122,000	P364,000
Less construction expense (105,000 + 192,000)	105,000	297,000
Profit recognized to date	17,000	67,000
Less profit recognized in prior year(s)	-	17,000
Profit recognized this year	P 17,000	P 50,000

The construction in progress account is a cost accumulation account similar to work in process account for job order costing, except that the percentage of completion method includes interim profits in the account. In a long-term construction contract, construction in progress is debited for construction expenses and profit. Thus, if construction expenses will be deducted from the construction in progress account, the difference is the profit recognized to date.

PROB. 13-17 *Suggested answer* (a) 150,000

Contract price	P3,000,000
Less total estimated cost (P1,800,000 + 600,000)	2,400,000
Estimated revenue	600,000

Multiply by percentage of completion (1,800,000/2,400,000)	75%
Realized revenue to date	450,000
Less realized revenue in prior year	300,000
Realized revenue this year	P 150,000

The percentage of completion method requires recognition of contract revenue and profit during the construction based on expected total profit and estimated progress towards completion in the current period. All related costs are recognized in the period in which they occur.

PROB. 13-18 *Suggested answer* (c) 50,000

Contract price	1,500,000
Less total estimated cost (465,000 + 1,085,000)	1,550,000
Estimated loss	50,000

Under both zero profit/cost recovery method and percentage of completion methods, when an increase in estimated total cost is so great that a loss on the entire contract is anticipated; that is, total estimated costs are expected to exceed the total revenue from the contract. Accounting standards require reporting the loss in its entirety in the period when the loss is first anticipated.

PROB. 13-19

a. *Suggested answer* (b) P118,000

Contract price	P 1,200,000
Less total estimated cost (590,000 + 410,000)	1,000,000
Estimated gross profit	200,000
Multiply by percentage of completion (590,000/ 1,000,000)	59%
Realized gross profit for 2020	P 118,000

A turn-key contract is a type of construction contract whereby the construction firm will provide not only the professional services but also the

manpower and the materials needed. When completed, the project will be turned over to the customer, hence the term "turn-key".

b. *Suggested answer* (c) P708,000

Cost incurred to date	P 590,000
Profit recognized on project in progress (a)	118,000
Balance of construction in progress, Dec. 31, 2020	P 708,000

Construction in progress account is a cost accumulation account similar with work in process account in job order costing, except that in percentage of completion, it also includes the interim profit recognized in a period.

PROB. 13-20 *Suggested answer* (a) P320,000

Contract billings	P470,000
Less Accounts receivable – construction contract billings	150,000
Cash collected in 2020 on this contract	P320,000

Usually, contracts require progress billings by the contractor and payments by the customer on these billings. The amount of these billings usually is specified by the contract terms and may be related to the costs actually incurred. As a protection for the customer, the contract frequently provides for an amount to be retained from the progress payments and is to be paid upon final acceptance of the construction. The billings, including any amount to be retained, are debited to Accounts Receivable and credited to deferred account, Progress Billings on Construction Contracts, that serve as an offset to the inventory account, Construction in Progress.

PROB. 13-21 *Suggested answer* (c) P1,400,000

Contract price	P 7,000,000
Less total costs (P5,000,000 + 2,800,000)	7,800,000
Gross loss	(800,000)
Less realized revenue prior years	600,000
Loss in the current year	P 1,400,000)

In reporting the anticipated contract losses, the recognition of which is more complex under the percentage of completion method. To properly reflect the

entire loss in the year it is first anticipated, the cumulative cost to deduct from cumulative recognized revenue cannot be the actual cost incurred, but must be the cumulative recognized revenue plus the entire anticipated loss.

PROB. 13-22 *Suggested answer (a) 250,000*

	2019	2020
Contract price	7,500,000	7,500,000
Less Estimated total costs	5,500,000	6,000,000
Gross profit	2,000,000	1,500,000
Percentage of completion		
2,750,000/5,500,000	50%	
5,000,000/6,000,000		83 1/3%
Realized revenue to date	1,000,000	1,250,000
Less Realized revenue prior years		1,000,000
Realized revenue this year		250,000

Again, under the percentage of completion method, a company recognizes revenues and costs on a contract as it progresses toward completion, rather than deferring recognition of these items until the contract is completed. The amount of revenue to be recognized each year is based on some measures of progress toward completion.

PROB. 13-23

a. *Suggested answer: (b) 400,000*

Costs incurred to date as of December 31, 2021	440,000
Divide by total costs as of 2021 (440,000 + 660,000)	1,100,000
Percentage of completion	40%
Multiply by initial contract price	1,000,000
Construction revenue for the year 2021	400,000

b. *Suggested answer: (c) 180,000*

Costs incurred to date as of December 331, 2022 (440,000 + 680,000)	1,120,000
Divided by total costs as of 2022 (440,000 + 680,000 + 280,000)	1,400,000

Percentage of completion as of 2022	80%
Cumulative gross profit as of 2022 [(1,500,000 – 1,400,000) x 80%]	80,000
Less realized gross loss 2021 (1,000,000 – 1,100,000)	(100,000)
Realized gross profit for the year 2022	180,000

c. *Suggested answer: (a) 1,200,000*

Contract price as of December 31, 2022	1,500,000
Multiply by percentage of completion as of 12/31/2022	80%
Construction in progress, December 31, 2022	1,200,000

d. *Suggested answer: (b) 30,000*

Final contract price (1,500,000 – 200,000)	1,300,000
Less actual total construction costs incurred (440,000 + 680,000 + 130,000)	1,250,000
Actual cumulative gross profit	50,000
Less cumulative gross profit as of 2022	80,000
Realized gross loss year ended December 31, 2023	30,000

PROB. 13-24 *Suggested answer (c) 54,000,000*

Under the zero profit method, revenue is recognized in an amount equal to costs incurred that are expected to be recovered and no profit is recognized until the entity can reasonably measure its progress. Thus, the amount of revenue to be recognized in 2020 is the amount of cost incurred in the same period.

PROB. 13-25

a. *Suggested answer: (c) 150,000*

Contract price as of 2019	1,000,000

Less total costs as of 2019 (800,000 + 250,000)	1,050,000
Cumulative gross loss as of 2019	50,000
Less realized gross loss 2018	(200,000)
Realized gross profit for the year 2019	150,000

b. *Suggested answer (a) 30,000*

Progress billings as of December 31, 2020 [1,000,000 x (30% + 20% + 40%)]	900,000
Less construction in progress as of December 31, 2020 (Costs incurred to date)	870,000
Excess of progress billings over construction in progress December 31, 2020	30,000

c. *Suggested answer: (b) 100,000*

Cumulative billings as of December 31, 2020 [1,000,000 x (30% + 20% + 40%)	900,000
Less mobilization fee deductible from first billing (1,000,000 x 5%)	50,000
Balance	850,000
Less collections of receivables, 12/31/2020 (120,000 + 450,000 + 180,000)	750,000
Balance of accounts receivable, 12/31/2020	100,000

PROB. 13-26 *Suggested answer (b) 7,500,000*

Contract price	20,000,000
Multiply by percentage of completion (6,000,000/16,000,000)	37.5%
Value of contract earned	7,500,000

The standard permits contract revenue to be recognized on the basis of cost incurred as a percentage of total estimated costs using the percentage of completion method.

PROB. 13-27

a. *Suggested answer* (a) P1,123,750

	2019	2020	2021
Actual cost incurred to date	3,000,000	6,500,000	8,200,000
Estd. Cost to complete	5,000,000	1,600,000	-
Total estimated cost	8,000,000	8,100,000	8,200,000
Percentage of completion	37.5%	80.25%	100%

Revenue recognized as of December 31, 2020 (P9,500,000 x 80.25%)	7,623,750
Less actual cost incurred to date	6,500,000
Estimated profit recognized as of December 31, 2020	1,123,750

In practice, various procedures are used to measure the extent of progress toward completion under the percentage of completion method, but the most widely used is the Cost-to-Cost, which is based on the assumed relationship between a unit of input and productivity. Under this method, the cost percentage is computed by dividing cumulative actual costs incurred by the total expected costs.

Note that under this method, the degree of completion is determined by comparing costs already incurred with the most recent estimates of total expected cost to complete the project. The percentage that costs incurred bear to total expected costs is applied to the expected net income on the project to arrive at earnings to date.

c. *Suggested answer* (c) P176,250

Total contract price	P9,500,000
Less total actual cost incurred	8,200,000
Estimated total gross profit	1,300,000
Less profit recognized as of December 31, 2020	1,123,750
Estimated gross profit recognized in 2021	P 176,250

The requirement is to determine the estimated gross profit (loss) to be recognized for the year ended December 31, 2021. At the year of completion

(2021), the total estimated total gross profit based on the revised contract price will be reduced by the estimated gross profit recognized in prior years.

PROB. 13-28 *Suggested answer (a) 1.5 million*

Materials	5.0 million
Labor	2.0 million
Construction overhead	2.0 million
Total cost incurred	9.0 million
Contract price	21.0 million
Less Total estimated cost (9 million + 9 million)	18.0 million
Gross profit	3.0 million
Multiply by percentage of completion [9 million/(9 million + 9 million)]	50%
Realized revenue – Year 1	1.5 million

Again, selling and marketing costs, as well as, depreciation of idle plant and equipment, whose use cannot be attributed to any construction contract, are not included in the contract costs.

PROB. 13-29 *Suggested answer (d) 870,000*

Initially agreed fixed contract	800,000
Variation in the contract	100,000
Penalty	(30,000)
Total contract revenue	870,000

Contract revenue is the total amount of consideration receivable under the contract. This will include revenue due from the originally agreed contract and from any subsequent changes (variations) in the contract provided that they have been agree, i.e. the amounts are known and are recoverable. Contract revenue may alter where it is possible for the contractor to make claims against the customer, or a third party, for costs that were not originally included in the contract.

Chapter 14

CONSIGNMENT SALES

Introduction

From the legal point of view, the transfer of goods represents a bailment, with the *consignee* (the party who undertakes to sell the goods) possessing the goods for the purpose of sale as specified in the agreement between the consignor (the party who owns the goods) and the consignee. The consignor holds the consignee accountable for goods transferred to the latter's care until the goods are sold to a third party. Upon such sale, the consignor recognizes a transfer of title to the goods and also revenue from the sale only when the account sales notification from the consignee is received. The consignee, on the other hand, cannot regard consigned goods as his or her property; nor is there any liability to the consignor other than accountability for consigned goods. The relationship between the consignor and the consignee is one of principal and agent, and the law of agency governs the determination of rights and obligations of the two parties. Therefore, any unsold goods (including a proportionate share of inventoriable costs incurred in the transfer of goods from the consignor to the consignee) must be included in the consignor's inventory.

ACCOUNTING FOR CONSIGNMENT

The factors that distinguish the consignment from a sale must be recognized when the transfer of goods and subsequent transactions are recorded. Consignment sales revenue should be recognized by the consignor when the consignee sells the goods to the ultimate customer. Therefore, no revenue is recognized at the time the consignor ships the goods to the consignee.

The accounting procedures followed by the consignee and the consignor depend upon the following:

1. **Consignment Profits are Separately Determined**

   When profits on consignment sales are to be determined separately, the consignee maintains a Consignment-In account for each consignment. This account is charged for all expenses that are to be

(2021), the total estimated total gross profit based on the revised contract price will be reduced by the estimated gross profit recognized in prior years.

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   When profits on consignment sales are to be determined separately, the consignee maintains a Consignment-In account for each consignment. This account is charged for all expenses that are to be

absorbed by the consignor, and is credited for the full proceeds from consignment sales. The commission or profit on consignment sales is ultimately transferred from the Consignment-In account to a separate revenue account, and the resulting balance in the Consignment-In account reports the amount that is owed to the consignor in settlement.

On the other hand, the consignor maintains a Consignment-Out account for each consignment. This account is debited for the cost of merchandise shipped to the consignee and for all expenses related to the consignment, and is credited for sales made by the consignee. Profit or loss from consignment sales is ultimately transferred from the Consignment-Out account to the income summary account in which the net result from all activities is summarized.

2. **Consignment Profits are Not Separately Determined**

When consignment transactions are to be combined with regular transactions, the consignee's entries for consignment sales are accompanied by entries debiting Purchases or Cost of Goods Sold and crediting the consignor for the amount to be paid for the goods sold. The consignee debits the consignor's accounts for expenses that are to be absorbed by the consignor. The resulting balance in the account with the consignor reports the amount owed in final settlement.

On the other hand, the consignor records consignment revenues and expenses in the accounts that summarize regular operations.

MULTIPLE CHOICE – Theory of Accounts

TOA 14-1 (AICPA)

Goods on consignment should be included in the inventory of

a. The consignor but not the consignee.
b. Both the consignor and consignee.
c. The consignee but not the consignor.
d. Neither the consignor nor the consignee.

TOA 14-2 (AICPA)

Consignor Co. paid the in-transit insurance premium for consignment goods shipped to Consignee Co. In addition, Consignor advanced part of the commission that will be due when Consignee sells the goods. Should Consignor include the in-transit insurance premium and the advanced commissions in inventory costs?

	Insurance premium	Advanced commission
a.	Yes	Yes
b.	No	No
c.	Yes	No
d.	No	Yes

TOA 14-3 (AICPA)

Jel Co., a consignee, paid the freight costs for goods shipped from Dale Co., a consignor. These freight costs are to be deducted from Jel's payment to Dale when the consignment goods are sold. Until Jel sells the goods, the freight costs should be included in Jel's

a. Cost of goods sold.
b. Freight-out costs.
c. Selling expenses.
d. Accounts receivable.

TOA 14-4 (Adapted)

In consignment sales, the consignee

a. Records the merchandise as an asset on its books.
b. Records a liability for the merchandise held on consignment.
c. Recognizes revenue when it ships merchandise to the consignor.
d. Prepares an "account report" for the consignor which shows sales, expenses, and cash receipts.

TOA 14-5 (Adapted)

In accounting for sales on consignment, sales revenue and the related cost of goods sold should be recognized by the

a. Consignor when the goods are shipped to the consignee.
b. Consignee when the goods are shipped to the third party.
c. Consignor when notification is received that the consignee has sold the goods.
d. Consignee when cash is received from the customer.

TOA 14-6 (Author)

When shall the consignor recognize revenue from consignment sales?

a. Upon delivery of the consigned goods to the consignee.
b. Upon signing of the consignment contract.
c. Upon sale by the consignee to final customers.
d. Upon remittance by the consignee of collection to the consignor.

TOA 14-7 (Author)

At the time of repossession of inventory by reason of defaulted installment receivable, the fair value of repossessed inventory is less than the net of the defaulted installment receivable and its corresponding deferred gross profit. The difference shall be recognized as

a. Deferred gain on repossession presented as current liability.
b. Gain on repossession as part of other comprehensive income.

c. Debit to retained earnings.
d. Loss on repossession as part of profit or loss

MULTIPLE CHOICE – Problems

PROB. 14-1 (Adapted)

On May 1, 2019, Holden Co. paid P5,000 for the insurance of consigned goods, while in transit, shipped to a consignee, and P7,000 for the freight. In addition, Holden advanced P5,000 as part of the commission that will be due when the consignee sells the goods. The consigned goods costs Holden P50,000 and will be sold for a total amount of P80,000. What is the total amount of inventory should Holden report for the consigned goods on May 1, 2019?

a. 50,000
b. 62,000
c. 67,000
d. 97,000

PROB. 14-2 (AICPA)

Stone Co. had the following consignment transactions during December 2019:

Inventory shipped on consignment to Beta Co.	P18,000
Freight paid by Stone	900
Inventory received on consignment from Alpha Co.	12,000
Freight paid by Alpha	500

No sales of consigned goods were made through December 31, 2019. Stone's December 31, 2019 balance sheet should include consigned inventory at

a. 12,000
b. 12,500
c. 18,000
d. 18,900

PROB. 14-3 (AICPA)

The following items were included in Opal Co.'s inventory account at December 31, 2019:

Merchandise out on consignment, at sales price, including 40% markup on selling price	P 40,000
Goods purchased, in transit, shipped FOB shipping point	36,000
Goods held on consignment by Opal	27,000

By what amount should Opal's inventory account at December 31, 2019 be reduced?

a. 103,000
b. 67,000
c. 51,000
d. 43,000

PROB. 14-4 (IFRS)

The Oddessa Appliance Center sells goods to a third party via an agent. During 2020, Oddessa supplies the agent with goods with a sales value of P200,000. The agent charges a commission of 15%. How much revenue should each of Oddessa and the agent recognize in profit or loss for 2020?

	Oddessa	Agent
a.	170,000	25,500
b.	200,000	25,500
c.	170,000	30,000
d.	200,000	30,000

PROB. 14-5 (AICPA)

On October 20, 2019, Grimm Co. consigned 40 freezers to Holden Co. for sale at P1,000 each and paid P800 in transportation costs. On December 30, 2019, Holden reported the sale of 10 freezers and remitted P8,500. The remittance was net of the agreed 15% commission. What amount should Grimm recognize as consignment sales revenue for 2019?

a. 7,700
b. 8,500
c. 9,800

d. 10,000

PROB. 14-6 (RPCPA)

Aircon, Inc. consigned ten one-horsepower air conditioning units to Argy Trading and paid P2,000 for the freight out. The consignee is allowed a commission of 5% on sales. Argy Trading submitted account sales on its transactions for the month of December 2019, as follows:

Sales (6 units, including 12.5% gross profit)		P 72,000
Less: Advances to consignor	P 10,000	
Selling expenses	800	
Installation and delivery	1,200	
Commission	7,200	19,200
Net remittance		P 52,800

How much was the net profit or loss of Aircon, Inc. on the consignment?

a. 52,800 profit
b. 7,800 loss
c. 2,200 profit
d. 1,400 loss

PROB. 14-7 (RPCPA)

CR Manufacturing Co. consigned to CE Trading Corp. twelve (12) Sony colored TV sets which cost P9,000 each. Freight out was paid by the consignor in the amount of P600. CE Trading sold eight (8) sets, rendered an account sales, and remitted the amount of P82,600 after deducting the following from the selling price of the sets sold:

Commission on selling price	12%
Selling expenses	P 1,200
Cost of antennae given free	1,400
Delivery and installation	2,800

a. The total selling price of the eight (8) sets sold by CE Trading Corp. is:

a. 100,000.00
b. 88,000.00
c. 98,560.00
d. 78,571.43

b. The net profit of CR Manufacturing Co. on the eight (8) sets sold by CE Trading Corp. is:
a. 40.00
b. 9,332.80
c. 10,200.00
d. 10,600.00

PROB. 14-8 (RPCPA)

Stainless Works Mfg. Co., consigned 5 dozens of stainless chairs to Urban Furniture Co. on April 1, 2019. Each chair cost P120 and the consignor paid P600 for the shipment to the consignee. On August 15, 2019, 36 chairs were already sold and the consignee rendered an account sales, and remitted the balance due the consignor in the amount of P5,580 after deducting the following:

Commission at 15% of the selling price	P 360
Selling expenses	180
Delivery and installation	

a. How much is the profit on consignment?
a. 660
b. 900
c. 1,000
d. 1,260

b. The cost of the inventory on consignment in the hands of Urban Furniture Co. is:
a. 2,880
b. 3,120
c. 3,480
d. 4,320

PROB. 14-9 (RPCPA)

On January 1, 2019, Pete Electrical Shop received from Marion Trading 300 pieces of bread toasters. Pete was to sell these on consignment at 50% above cost, for a 15% commission on the selling price. After selling 200 pieces, Pete had the remaining unsold units repaired for some electrical defects for which he spent P2,000. Marion subsequently increased the selling price of the remaining units to P330 per unit.

On January 31, 2019, Pete remitted P64,980 to Marion after deducting the 15% commission, P850 for delivery expenses of sold units, and P2,000 for the repair of 100 units. The consigned goods cost Marion Trading P200 per unit, and P900 had been paid to ship them to Pete Electrical Shop. All expenses in connection with the consignment were reimbursable to the consignee.

a. The consignment profit on the units sold was:
   a. 12,200
   b. 12,880
   c. 13,000
   d. Answer not given

b. The value of inventory on consignment was:
   a. 8,120
   b. 8,800
   c. 8,920
   d. Answer not given

PROB. 14-10 (RPCPA)

Philacor, Inc. consigned twelve refrigerators to Ocampo's Emporium. The refrigerators cost P6,000 each and the consignor paid P720 for freight out. The consignee subsequently rendered an account sales for five units sold at P7,700 each, and deducted the following items from the selling price:

Commission (based on sales net of commission)	10%
Marketing expense (based on commission)	10%
Delivery and installation (on each unit sold)	P 30

a. How much was the net profit of the consignor on the five refrigerators sold?
   a. 3,815

b. 37,780
c. 4,200
d. 3,395

b. How much was the net remittance of the consignee on the five refrigerators sold?
   a. 34,500
   b. 33,780
   c. 4,500
   d. 4,200

PROB. 14-11 (RPCPA)

In September 2019, Conanan Books Store consigned 3,200 books, costing P60 and retailing for P100 each to Rosales Store, debiting Accounts Receivable and crediting Sales for the retail sales price. Freight cost of P3,200 was debited to Freight Expenses by the consignor. On September 30, 2019, Conanan Books Store received from Rosales Store the amount of P142,020 in full settlement of the balance due, and Accounts Receivable was credited for this amount. The consignor deducted a commission of P20 for each book sold, P180 for delivery expenses and P200 for advertising expense. How many books were actually sold by Rosales Store?

a. 1,424
b. 1,780
c. 2.064
d. 3,200

PROB. 14-12 (AICPA)

On November 30, 2019, Northup Co. consigned 90 freezers to Watson Co. for sale at P1,600 each and paid P1,200 in transportation costs. A report of sales was received on December 30, 2019 from Watson reporting the sale of 20 freezers, together with a remittance was net of the agreed 15% commission. How much, and what month, should Northup recognize as consignment sales revenue?

	November	December
a.	0	32,000
b.	0	27,200

c.	144,000	0
d.	142,800	0

PROB. 14-13 (AICPA)

On December 1, 2019, Alt Department Store received 505 sweaters on consignment from Todd. Todd's cost for the sweaters was P80 each, and they were priced to sell at P100. Alt's commission on consigned goods is 10%. At December 31, 2019, five sweaters remained. In its December 31, 2019 balance sheet, what amount should Alt report as payable for consigned goods?

a. 49,000
b. 45,400
c. 45,000
d. 40,400

PROB. 14-14 (Author)

On January 1, 2021, Entity A entered into a consignment arrangement with Entity B. The consignment arrangement provides that Entity B is entitled to 5% commission based on sales. Entity A manufactured 100 boxes of product at manufacturing cost of P200,000 On July 1, 2021, Entity A shipped through a common carrier 30 boxes of consigned goods to Entity B. The common carrier collected the freight amounting to P3,000 from Entity B. For the year ended December 31, 2021, Entity B sold on cash 20 boxes of consigned goods to final consumers at Entity A's predetermined price of P3,000 per box.

a. What is the net income to be reported by Entity A for the period ended December 31, 2021?
   a. 15,000
   b. 18,000
   c. 16,400
   d. 17,000

b. Using the same data in preceding number, what is the net remittance to be made by Entity B to Entity A as of December 31, 2021?
   a. 60,000

b. 57,000
c. 63,000
d. 54,000

ANSWERS – Theory of Accounts

TOA 14-1 *Suggested answer (a) The consignor but not the consignee*

The consignor is the manufacturer or wholesaler that transfers the goods to an agent called the consignee, who in return sells the goods in behalf of the consignor. Thus, consigned goods are the property of the consignor.

TOA 14-2 *Suggested answer (c) Yes, No*

Inventoriable costs include all cost of making the inventory ready for sale. Cost, incurred by a consignor on the transfer of goods to a consignee are costs necessary to prepare the inventory for sale. Consequently, they are inventoriable. Thus, the in-transit insurance premium paid is inventoried; while the advanced commissions constitute a receivable or prepaid expense, and not an element of inventory costs.

TOA 14-3 *Suggested answer (d) Accounts receivable*

The consignee should debit consignment-in for the freight costs paid. Consignment-in is a receivable/payable account used by consignees. It represents the amount payable to the consignor, if it has a credit balance. If it has a debit balance, it reflects the amount receivable from the consignor. Before consigned goods are sold, expenditures chargeable to the consignor are recorded in the consignment-in account as receivable. After the consigned goods are sold, the consignee's net liability to the consignor is reflected in the account.

TOA 14-4 *Suggested answer (d)*

The consignee shall prepare the account sales to inform the consignor of sales, expenses, and cash receipts during the period. *It is also at this point when the consignor shall recognize revenue for the consigned goods.*

TOA 14-5 *Suggested answer (c) Consignor when notification is received that the consignee has sold the goods.*

In consignment sales arrangement, the consigned goods are in the possession of the consignee but remain the property of the consignor and are included in the consignor's inventory. Sales revenue and the related cost of goods sold from these consigned goods should be recognized by the consignor only when the merchandise is sold and delivered to the ultimate customer. Accordingly, recognition occurs when notification is received that the consignee has sold the goods.

TOA 14-6 *Suggested answer (c) Upon sale by the consignee to final customers*

TOA 14-7 *Suggested answer (d) Loss on repossession as part of profit or loss*

SOLUTIONS - Problems

PROB. 14-1 *Suggested answer* (b) P62,000

Cost of goods on consignment		P 50,000
Add inventoriable costs:		
Insurance	P 5,000	
Freight	7,000	12,000
Total cost of inventory on consignment		P 62,000

Inventoriable costs include all costs necessary to prepare goods for sale (e.g., the purchase price or manufacturing costs, freight, and other costs necessary to get the goods to the point of sale. Thus, the insurance for the goods while in transit and freight are included in inventory costs. Commissions paid to consignee are selling expenses in the period the consigned goods are sold which are not required to prepare the goods for sale. The selling price of the goods was ignored, because, normally, inventory should be value at cost.

PROB. 14-2 *Suggested answer* (d) P18,900

Inventory shipped on consignment to Beta Co.	P 18,000
Freight paid by Stone	900
Value of consigned inventory	P 18,900

Freight paid for the transfer of goods from the consignor to the consignee is inventoriable by the consignor.

PROB. 14-3 *Suggested answer* (d) P43,000

Markup on selling price of consigned goods (P40,000 x 40%)	P 16,000
Goods held on consignment by Opal	27,000
Total reduction in inventory	P 43,000

Normally, inventories should be valued at cost; thus, the markup on cost must not be included. When goods were shipped FOB shipping point, the

title to the goods passes to the buyer; thus, it is appropriate to include this in its inventory. The goods held on consignment are owned by the consignor; thus, shall be excluded in the consignee's inventory.

PROB. 14-4 *Suggested answer (d) 200,000 30,000*

Oddessa, the consignor, shall recognize a sales revenue for an amount equal to the selling price of the goods (P200,000); while the agent, who is on commission basis, shall recognize commission income of P30,000 (15% x 200,000.

PROB. 14-5 *Suggested answer* (d) P10,000

Consignment sales revenue (P1,000 x 10)	P 10,000

A consignor recognizes sales revenue from consignments when the consignee sells the consigned goods to the ultimate customer. Sales commissions earned by the consignee are reported as selling expense by the consignor and are not netted against sales revenue. Transportation cost from the consignor to the consignee is inventoriable by the consignor, and allocated to the units delivered.

PROB. 14-6 *Suggested answer* (c) P2,200

Gross profit (P72,000 x 12.5%)		P 9,000
Less expenses:		
Freight (P2,000 x 6/10)	P 1,200	
Selling expenses	800	
Installation and delivery	1,200	
Commission (P72,000 x 5%)	3,600	6,800
Net profit on consignment		P 2,200

Although the cost of goods sold was not provided, net profit or loss from consignment may be computed based on the gross profit, as shown above.

PROB. 14-7

a. *Suggested answer* (a) P100,000

Consignee's remittance		P 82,600
Add consignee's charges:		
Selling expenses	P 1,200	
Cost of antennae given free	1,400	
Delivery and installation	2,800	5,400
Selling price before 12% commission		88,000
Add commission		
(P88,000/ 88% x 12%)		12,000
Selling price after 12% commission		P100,000

Accounts sales *is a report submitted by the consignee usually upon his remittance to the consignor, which shows the number of units received, goods sold and unsold, expenses incurred by the consignee, advances made to the consignor, and the amount owed or remitted. Therefore, the balance of the selling price after deducting the consignee's charges is the amount owed or remitted by the consignee to the consignor.*

b. *Suggested answer* (c) P 10,200

Sales (a)		P 100,000
Less cost and expenses:		
Cost of sales (P9,000 x 8)	P 72,000	
Freight out (P600 x 8/12)	400	
Commission (a)	12,000	
Selling expenses	1,200	
Cost of antennae given free	1,400	
Delivery and installation	2,800	89,800
Consignment profit		P 10,200

The consignment profit that the consignor will earn is the excess of sales price over the applicable cost and expenses charged by the consignor and the consignee. It should be noted that the freight out paid by the consignor is applicable to the entire goods delivered; thus, an allocation is needed to determine the amount applicable to the number of units sold.

PROB. 14-8

a. *Suggested answer* (b) P900

Sales [(P5,580 + 360 + 180)/ 85%]		P 7,200
Less cost and expenses:		
Cost of sales (P120 x 36)	P 4,320	
Shipping cost (P600 x 36/60)	360	
Commission (P7,200 x 15%)	1,080	
Selling expenses	360	
Delivery expenses	180	6,300
Consignment profit		P 900

Again, the consignment profit that the consignor will earn is the excess of selling price over the applicable cost and expenses.

b. *Suggested answer* (b) P3,120

Cost of unsold goods (P120 x 24)	P 2,880
Applicable shipping cost (P600 x 24/60)	240
Total cost of inventory on consignment	P 3,120

***Inventoriable costs** include the original cost of goods and subsequent expenses that increases its value (i.e., freight and insurance), that should be allocated between sold and unsold units.*

PROB. 14-9

a. *Suggested answer* (c) P13,000

Sales [(P64,980+850+2,000)/85%]			P 79,800
Less cost and expenses:			
Cost of sold units			
Old price @ P300	200 units		
New price @ P330 [P79,800-(200xP300)]/P330	60 units		
Total sold units	260 units		
Multiply by unit cost	P 200	52,000	
Shipping cost (260/300xP900)		780	
Repair (P2,000 x 60/100)		1,200	
Delivery expenses		850	

Commission (15%xP79,800)	11,970	66,800
Consignment profit		P 13,000

The consignee is entitled to reimbursement for necessary expenditures on consigned goods and also to compensation for sales. Necessary expenditures depend upon the nature of goods consigned and ordinarily include freight, insurance, taxes, storage, handling charges, repairs under warranties, and such other charges as are by custom borne by the consignor. Expenditures that are authorized by special agreement or that are chargeable by law to account of the consignor, as well as amounts allowed as compensation on sales represent liens by the consignee on consigned goods or on sales proceeds. The retail selling price of consigned goods can be controlled by the consignor, who still owns the goods; thus the consignor may increase the selling price of the consigned goods.

b. *Suggested answer* (c) P8,920

Cost of unsold goods (P200 x 40)	P 8,000
Shipping cost (P900 x 40/300)	120
Repair (P2,000 x 40/100)	800
Value of inventory on consignment	P 8,920

*Again, **inventoriable costs** include the original cost of goods and subsequent expenses that increases its value (i.e., freight and repair), that should be allocated between sold and unsold units. Thus, all inventoriable cost applicable to the unsold goods on consignment forms part of the value of inventory on consignment.*

PROB. 14-10

a. *Suggested answer* (c) P4,200

Sales (P7,700 x 5)		P 38,500
Less: Consignor's charges:		
Cost (P6,000 x 5)	P 30,000	
Freight out (P720 x 5/12)	300	
Consignee's charges:		
Commission (P38,500/110% x 10%)	3,500	
Marketing (P3,500 x 10%)	350	

Delivery and installation (P30 x 5)	150	34,300
Consignor's profit		P 4,200

If all the consigned goods are not sold at the time the parties to a consignment prepare financial statements, it becomes necessary to compute the profit realized on the part that was sold. Those charges relating to ***consigned goods sold*** *should be applied against current revenue; while those charges relating to* ***consigned goods still on hand*** *are properly deferred so that they can be assigned to revenue of subsequent period. Therefore, it is important to distinguish the inventoriable costs from non-inventoriable costs.*

Inventoriable costs *include the original cost of goods and subsequent expenses that increases its value (i.e., freight and insurance), that should be allocated between sold and unsold units.* ***Non-inventoriable costs*** *are expenditures that should be charged to expense in the period incurred (i.e., advertising, delivery and installation, commission, and other selling expenses), that should not be allocated between sold and unsold units.*

b. *Suggested answer* (a) P34,500

Sales		P 38,500
Less Consignee's charges:		
Commission	P 3,500	
Marketing	350	
Delivery and installation	150	4,000
Net remittance of the consignee		P 34,500

The relationship between the consignor and the consignee is one of principal and agent, and the law of agency governs the determination of the rights and the obligations of the two parties. One of the duties of the consignee is to report regularly on the progress of consignment sales through ***account sales.*** *This report shows the goods received on consignment, the goods sold, sales price, expenses, advances made, the amount owed, and the amount remitted. Remittance may be scheduled as agreed portion of the shipment sold or may not be required until all the consigned goods have either been sold or returned to the consignor. The amount to be remitted is the total amount of units sold minus the charges made by the consignee.*

PROB. 14-11 *Suggested answer* (b) P1,780

Amount remitted	P 142,020
Add consignee' charges (excluding commission):	
Delivery expenses	180
Advertising	200
Sales (net of commission)	142,400
Divide by sales price per unit (net of commission) (P100 - 20)	80
Number of books sold	1,780

The requirement is to determine the number of books sold. Since commission is based on each unit sold, computation of the number of books sold may be based on the sales, net of commission, and accordingly divide by the sales price per unit, net of commission.

PROB. 14-12 *Suggested answer* (a) P 0, P32,000

With the legal title to the goods retained by the owner until sale, goods may be transferred by the owner to another party who is to act as ***sales agent.*** *Such transfer is known as a consignment. The consignor holds the consignee accountable for goods transferred to the latter's care until the goods are sold to a third party. Upon sale, the consignor recognizes a transfer of title to the goods and also revenue from the sale.*

When the consignor receives an ***account sales,*** *Cash is debited for the cash accompanying the statement, expenses account are debited for expenses charged to the consignor's account by the consignee, and Sales is credited for the gross sales reported by the consignee.*

Therefore, sales revenue should ***not*** *be recognized at the date of transfer, and the sales revenue that should be recognized is equal to the amount of units actually sold to the third party (P1,600 x 20 = P32,000). Note that sales commission made by the consignee would be reported as a selling*

expense by the consignor and would **not** *be netted against the sales revenue recognized by the consignor.*

PROB. 14-13 *Suggested answer* (c) P45,000

Sales revenue (P100 x 500)	P 50,000
Less commission (P50,000 x 10%)	5,000
Payable for consigned goods	P 45,000

The requirement is to determine the amount Alt should report as payable for consigned goods. In consignment, the consignee is liable to the consignor only for the goods sold, and does not owe the consignor anything for the unsold goods.

PROB. 14-14

a. *Suggested answer (a) 15,000*

Sales revenue (20 x 3,000)		60,000
Less: Cost of sales		
[(200,000 x 20/100) + (3,000x 20/30)	42,000	
Commission expenses (20 x 3,000 x 5%)	3,000	45,000
Net income of consignor		15,000

b. *Suggested answer (d) 54,000*

Cash sales collected by consignee (20 x 3,000)		60,000
Less: Freight collect paid by consignee	3,000	
Sales commission	3,000	6,000
Net remittance by consignee to consignor		54,000

Chapter 15

FRANCHISE OPERATIONS

Introduction

Franchise is a privilege, granted by government authority, sanctioning a monopoly or permitting the use of public property, usually subject to regulation, known as *franchise between the government and a private company or an individual*; or a privilege, often exclusive, conferred on a dealer by a manufacturer, to sell the manufacturer's products within a specified territory, known as *franchise between private companies and an individual.*

The following topics are specifically included in the Revised CPA Licensure Examination Syllabi provided by the Board of Accountancy effective May 2019 Examination.

FRANCHISE REVENUE

Franchise revenue may cover the supply of initial and subsequent services, equipment and other intangible assets. Accordingly, franchise fees are recognized as revenue on a basis that reflects the purpose for which the fees were charged. IFRS 15, *Revenue from Contracts with Customers,* identifies the following sources of franchise revenue, such as: Initial Franchise Fee, and Continuing Franchise Fee.

Initial Franchise Fee

It is a consideration for establishing the franchise relationship and providing some initial services, which may include consideration for initially required equipment and inventory, but those items are usually subject of separate consideration. It is recognized when all performance obligations relating to the sale have been substantially satisfied by the franchisor.

Continuing Franchise Fee

It is a consideration for the continuing rights granted by the franchise agreement and for general or specific services (e.g. training, advertising and promotion, etc.) during its life. It shall be reported as revenue when earned and becomes receivable from the franchisee. Cost relating to continuing franchise fee shall be expensed as incurred.

BARGAIN PURCHASE OPTION

It is an option in which the franchisee is allowed to purchase equipment or supplies for a price that is significantly lower than the fair value of the equipment or supplies. When the initial franchise fee is paid, the franchisee is given the right to make bargain purchases for a specified period at a specified amount. The portion of initial franchise fee shall be deferred and accounted for as adjustment of the selling price when the franchisee purchases the equipment or supplies. The portion deferred shall be either: the difference between the selling price to other customer and the bargain purchase price; or an amount sufficient to cover any costs in excess of the bargain purchase price and provide a reasonable profit on sale, as appropriate.

COMMINGLED REVENUE

The franchise agreement may establish a single initial franchise fee as consideration for the franchise rights and initial services to be performed by the franchisor. Sometimes, the franchise fee may also cover tangible property, such as equipment, inventory, etc. In these circumstances, the portion of the fee applicable to these tangible assets shall be based on the fair value of the assets and may be recognized before or after recognizing the portion applicable to the initial services. In other words, when the portion of the fee relating to these tangible assets is objectively determinable, it is appropriate to recognize that portion when their title passes even though the balance of the fee relating to services is recognized when the remaining services or conditions in the franchise agreement have been substantially performed or satisfied.

The specific services to be provided by the franchisor are interrelated to such an extent that the amount applicable to each service cannot be segregated objectively. The fee shall not be allocated among the different services as means of recognizing any part of the fee for services as revenue before all the services have been substantially performed or satisfied unless actual transaction prices are available for individual services through recent sales of the separate specific services.

REPOSSESSED FRANCHISE

A franchisor may recover franchise rights through repossession if a franchisee decides not to open an outlet. If the franchisor refunds the consideration received, the original sale is cancelled, and revenue previously recognized shall be accounted for as a reduction in revenue in the period the franchise is repossessed. However, if no refund is made for the repossessed franchise rights, the following shall be observed:

a. The transaction shall not be regarded as cancellation of sale.
b. No adjustment shall be made to any previously recognized revenue.
c. Any estimated uncollectible amounts resulting from unpaid receivables shall be provided.
d. Any consideration retained for which revenue was not previously recognized shall be reported as revenue.

OPTION TO PURCHASE THE FRANCHISE OUTLET

As a matter of management policy or to preserve the reputation and goodwill of the franchise system, a franchise agreement may give the franchisor an option to purchase the franchisee's business. At this situation, the likelihood of the franchisor's acquiring the franchise outlet shall be considered in accounting for the initial franchise fee. If at the time the option was given, there is an understanding that the option will be exercised or it is probable that the franchisor will acquire the franchise outlet, the initial franchise fee shall be deferred as revenue. When the option is exercised, the deferred amount shall reduce the franchisor's investment in the outlet purchased.

FINANCIAL STATEMENT DISCLOSURES

The nature of all significant commitments and obligations resulting from franchise agreements, including descriptions of services that the franchisor has agreed to provide and have not yet been substantially performed shall be disclosed.

If there is no basis for estimating the collectability of specific franchise fee, the notes to the financial statements shall disclose the method used to account for the related franchise fee revenue, like the installment or cost recovery method. Furthermore, the sales price of such franchises, the revenue and related costs deferred, and the periods in which such fees become payable by the franchisee shall be disclosed. Any amounts originally deferred but later recognized because uncertainties regarding the collectability of the franchise fee are resolved also shall be disclosed.

Initial franchise fee shall be segregated from other franchise fee revenue if they are significant. If it is probable that the initial franchise fee revenue will decline in the future because sales predictably reach a saturation point, disclosure of that fact is desirable.

Revenue and costs related to franchisor-owned outlets shall be distinguished from revenue and costs related to franchised outlet when practicable by segregating revenue and costs related to franchised outlets. If there are significant changes in franchisor-owned outlets or franchised outlets during the period, the number of franchises sold, franchises purchased during the period, franchise outlets in operation, and franchisor-owned outlets in operation shall be disclosed.

ACCOUNTING FOR SMALL AND MEDIUM-SIZED ENTITIES (SMEs)

The IFRS/PFRS for SMEs, Section 23, *Revenue,* states that franchise fees may cover the supply of initial and subsequent services, equipment and other intangible assets. Accordingly, franchise fees are recognized as revenue on a basis that reflects the purpose for which the fees were charged. The following methods of franchise fee recognition are appropriate:

- The franchisor recognizes the fair value of the assets sold as revenue when the items are delivered or title passes.

- Fees for the provisions of continuing services, whether part of the initial fee or a separate fee, are recognized as revenue as the services are rendered. When the separate fee does not cover the cost of continuing services together with a reasonable profit, part of the initial fee, sufficient to cover the cost of continuing services and to provide a reasonable profit on those services, is deferred and recognized as revenue as the services are rendered.

- The franchise agreement may provide for the franchisor to supply equipment, inventories, or other tangible assets, at a price lower than that charged to others or a price that does not provide a reasonable profit on those sales, in which case, part of the initial fee, sufficient to cover estimated costs in excess of that price and to provide a reasonable profit on those sales, is deferred and accounted for as an adjustment of the selling price when the franchisee purchases the equipment or supplies. The balance of the initial fee is recognized as revenue when performance of all the initial services and other obligations required of the franchisor has been substantially performed.

- The initial services and other obligations under an area franchise agreement may depend of on the number of individual outlets established in the area. In this case, the fees attributable to the initial services are recognized as revenue in proportion to the number of outlets for which the initial services have been substantially performed.

- If the initial fee is collectible over an extended period and there is a significant uncertainty that it will be collected in full, the fee is recognized as cash installments are received.

- Fees charged for the use of continuing rights granted by the agreement, or for other services provided during the period of the agreement, are recognized as revenue as the services are provided or the rights used.

- Transactions may take place between the franchisor and the franchisee that, in substance, involve the franchisor acting as agent for the franchisee. Such transactions do not give rise to revenue.

- The software developer recognizes fees from the development of customized software as revenue by reference to the stage of completion of the development, including completion of services provided for post-delivery service support.

MULTIPLE CHOICE – Theory of Accounts

TOA 15-1 (Adapted)

An entity enters into a contract with a customer and promises to grant a franchise license that provides the customer with the right to use the entity's trade name and sell the entity's product for ten years. The entity also promises to provide the equipment necessary to operate a franchise outlet. In exchange for granting the license, the entity receives a sales-based royalty of 5% of the customer's monthly sales. What is/are the performance obligation/s to be identified by the franchisor?

a. Franchise license only
b. Equipment license only
c. Franchise license and equipment
d. Right to use entity's trade name and sell the entity's product

TOA 15-2 (AICPA)

Types of franchising arrangements include all of the following, except

a. Service sponsor – retailer
b. Wholesaler – service sponsor
c. Manufacturer – wholesaler
d. Wholesaler – retailer

TOA 15-3 (Adapted)

IFRS 15, *Revenue from Contracts with Customers*, identifies these sources of franchise revenue.

a. Advertising and promotion
b. Site selection assistances and training
c. Bookkeeping and advisory services
d. Initial franchise fee and continuing franchise fee

TOA 15-4 (Adapted)

Portion of the initial franchise fee may be allocated to

a. Continuing franchise fee.
b. Bargain purchase option as adjustment of the selling price.
c. Option to purchase the franchisee's business.
d. All of these may reduce the amount of the initial franchise fee that is recognized as revenue.

TOA 15-5 (Adapted)

Continuing franchise fees should be recorded by the franchisor
a. As revenue when earned and receivable from the franchisee.
b. As revenue when received.
c. In accordance with the accounting procedures specified in the franchise agreement.
d. As revenue only after the balance of the initial franchise fee has been collected.

TOA 15-6 (Adapted)

In accordance with IFRS 15, *Revenue from Contracts with Customers,* franchise revenue should be recognized
a. On the date the contract was signed.
b. On the date the operation commenced.
c. On the date the franchise fee is paid to franchisor.
d. When performance obligations are satisfied.

TOA 15-7 (Adapted)

Occasionally, a franchise agreement grants the franchisee the right to make future bargain purchases of equipment or supplies. When recording the initial franchise fee, the franchisor should
a. Increase revenue recognized from the initial franchise fee by the amount of the expected future purchases.
b. Record a portion of the initial franchise fee as unearned revenue which will increase the selling price when the franchisee subsequently makes the bargain purchases.
c. Defer recognition of any revenue from the initial franchise fee until the bargain purchases are made.

d. None of these.

TOA 15-8 (Adapted)

A franchise agreement grants the franchisor an option to purchase the franchisee's business. It is probable that the option will be exercised. When recording the initial franchise fee, the franchisor should

a. Record the entire initial franchise fee as a deferred credit, which will reduce the franchisor's investment in the purchase outlet when the option is exercised.
b. Record the entire initial franchise fee as unearned revenue which will reduce the amount of cash paid when the option is exercised.
c. Record the option of the initial franchise fee which is attributable to the bargain purchase option as a reduction of the future amount recoverable from the franchisee.
d. None of these.

MULTIPLE CHOICE - Problems

PROB. 15-1 (Adapted)

An entity enters into a contract with a customer and promises to grant a franchise license that provides the customer with the right to use the entity's trade name and sell the entity's product for ten years. The entity also promises to provide the equipment necessary to operate a franchise outlet. In exchange for granting the license, the entity receives a sales-based royalty of 5% of the customer's monthly sales. Assume the fixed consideration for the equipment is P1,500,000 payable when the equipment is delivered and the customer's sales for the month is P4,000,000. How would the transaction price be allocated to performance obligation/s?

a. Equipment P1.5m, Franchise license P4m
b. Equipment P1.5m, Franchise license P200,000
c. Franchise license P1.7m
d. Franchise license P200,000

PROB. 15-2 (Adapted)

Hungry Jacks Inc. granted a franchise rights to Burger Machine for an initial franchise fee of P1,800,000, with P520,000 paid when the agreement is signed on January 1, 2020. The balance shall be paid in four annual installments with a present value of P1,014,000 discounted at 10%. The franchise agreement stipulates that the franchisee has the right to purchase P80,000 worth of kitchen equipment and supplies for P60,000. Portion of the initial franchise fee is designated for advertising to be provided by Hungry Jacks for the next five years in the amount of P1,500 per month. Collectibility of the payments is reasonably assured and the franchisor has performed all the initial services required on time.

What is the journal entry to recognize revenue from franchise fee when the agreement is signed?

a.

Cash	520,000	
Notes receivable	1,280,000	
Unearned franchise fee		356,000
Revenue from franchise fee		1,444,000

b.	Cash	520,000	
	Notes receivable	1,280,000	
	Unearned interest income		266,000
	Unearned franchise fee		110,000
	Revenue from franchise fee		1,424,000
c.	Cash	520,000	
	Notes receivable	1,280,000	
	Revenue from franchise fee		1,800,000
d.	Cash	520,000	
	Notes receivable	1,280,000	
	Unearned revenue from franchise fee		1,800,000

PROB. 15-3 (Adapted)

On January 1, 2020, Macas Inc. signed an agreement granting Mc Co. to operate as a franchisee for an initial franchise fee of P3,000,000. At that date, an amount of P1,000,000 was paid and the balance is payable in five annual payments beginning January 1, 2021. The present value of the annual payments at 11% is P1,043,300. The agreement provides that the down payment is non-refundable. On April 1, 2020 Mc Co. commences its operations and all services related to franchise rights required of the franchisor has been substantially performed. In addition to the franchise rights, Macas shall provide a year long training services beginning on the signing date. These services have a value of P120,000.

1. What is the journal entry to be recorded on January 1, 2020 (date of signing the agreement)?

a.	Cash	1,000,000	
	Notes receivable	2,000,000	
	Unearned franchise fee		120,000
	Revenue from franchise fee		2,880,000
b.	Cash	1,000,000	
	Notes receivable	2,000,000	
	Unearned interest income		956,700
	Revenue from franchise fee		2,043,300
c.	Cash	1,000,000	
	Notes receivable	2,000,000	
	Unearned interest income		956,700
	Unearned service revenue - training		120,000
	Unearned franchise revenue		1,923,300

d.	Cash	1,000,000	
	Notes receivable	2,000,000	
	Unearned franchise revenue		3,000,000

2. What is the journal entry to be recorded on April 1, 2020 (date of commencement of operations)?

a.	Unearned franchise revenue	1,923,300	
	Unearned service revenue – training	30,000	
	Franchise revenue		1,923,300
	Service revenue – training		30,000
b.	Unearned franchise revenue	2,043,300	
	Franchise revenue		2,043,300
c.	Unearned franchise revenue	2,880,000	
	Unearned service revenue – training	120,000	
	Franchise revenue		2,880,000
	Service revenue – training		120,000
d.	Unearned franchise revenue	1,923,300	
	Franchise revenue		1,923,300

3. What is the journal entry to be recorded on December 31, 2020?

a.	Unearned franchise revenue	2,043,300	
	Unearned service revenue - training	90,000	
	Franchise revenue		2,043,300
	Service revenue - training		90,000
b.	Unearned franchise revenue	1,923,300	
	Franchise revenue		1,923,300
c.	Unearned service revenue - training	90,000	
	Service revenue - training		90,000
d.	No entry		

PROB. 15-4 (AICPA)

On January 1, 2020, Browns Co. entered into a franchise agreement with a company allowing that company to do business under Browns' name. Browns had performed substantially all required services by January 1, 2020, and the franchisee paid the initial franchise fee of P70,000 in full on that date. The

franchise agreement specifies that the franchisee must pay a continuing franchise fee of P6,000 annually, of which 20% must be spent on advertising by Browns. What journal entry should Browns make on January 1, 2020 to record receipt of the initial franchise fee and the continuing franchise fee for 2020?

a.	Cash	76,000	
	Franchise fee revenue		70,000
	Revenue from continuing franchise fee		6,000
b.	Cash	76,000	
	Unearned franchise fee		76,000
c.	Cash	76,000	
	Franchise fee revenue		70,000
	Revenue from continuing franchise fee		4,800
	Unearned franchise fee		1,200
d.	Cash	76,000	
	Prepaid advertising	1,200	
	Franchise fee revenue		70,000
	Revenue from continuing franchise fee		6,000
	Unearned franchise fee		1,200

PROB. 15-5 (RPCPA)

Andok Manok Corp. awarded its franchise to Chicken House for a total fee of P100,000. Of the said amount, P50,000 was payable upon the signing of the agreement and the balance in two equal annual payments. The contract provided that in the event the first year would result in an operating loss, the franchising agreement may be cancelled without the need for returning any portion of the franchise fee already paid nor the payment of any balance still unpaid. The entry to record the granting of franchise to Chicken House would be:

a.	No entry		
b.	Cash	P 50,000	
	Notes receivable	50,000	
	Unearned franchise fee		P 100,000
c.	Cash	50,000	
	Notes receivable	50,000	
	Franchise fee revenue		100,000
d.	Cash	50,000	
	Notes receivable	50,000	
	Unearned franchise fee		50,000

Franchise fee revenue	50,000

PROB. 15-6 (Adapted)

On November 1, 2020, a franchisee bought a franchise from Max Turkey for a sales price of P5,000,000 to sell Max Turkey's products for a period of 20 years. Their agreement provides that P500,000 will be paid in advance and the balance in 5 equal annual installments, evidenced by a 9% promissory note; and Max Turkey will be responsible in making the feasibility study of the project and six months training of the franchisee's staff and employees. The present value factors for the 9% rate follow:

Present value of P1 for 5 periods	0.650
Present value of an annuity of P1 for 5 periods	3.890
Present value of an annuity of P1 for 5 periods (in advance)	4.240

Assuming collection of the note is reasonably assured, what is the amount of franchise revenue should Max Turkey recognize for the year ended December 31, 2020?

a. 0
b. 1,085,000
c. 4,001,000
d. 4,316,000

PROB. 15-7 (AICPA)

Fish Ball Co. charges P90,000 for a franchise, with P18,000 paid when the agreement is signed and the balance in four annual payments. The present value of the annual payments, discounted at 9% is P58,315. The franchisee has the right to purchase P20,000 of equipment for P16,000. If collectibility of the payments is reasonably assured and substantial performance by Fish Ball has occurred, what is the amount of revenue from franchise fee that should be recognized?

a. 72,000
b. 72,315
c. 76,315
d. 90,000

PROB. 15-8 (RPCPA)

Hot Pizza granted a franchise to Shake King. Shake King was to pay a franchise fee of P100,000 payable in five equal annual installments starting with the payment upon signing of the agreement. The franchisee was to pay monthly 1% of gross sales of the preceding month. Should the operation of the outlet prove to be unprofitable, the franchise may be cancelled with whatever obligation owing Hot Pizza, in connection with the P100,000 franchise fee, waived. The first year of operations generated a gross sales of P500,000. For the first year, Hot Pizza earned franchise fee of

a. 5,000
b. 20,000
c. 25,000
d. 105,000

PROB. 15-9 (AICPA)

Each of Potter Pie Co.'s 21 new franchisee contracted to pay an initial franchise fee of P30,000. By December 31, 2020, each franchisee had paid a non-refundable P10,000 fee and signed a note to pay P10,000 principal plus the market rate of interest on December 31, 2021 and December 31, 2022. Experience indicates that one franchise will default on the additional payments. Services for the initial franchise fee will be performed in 2021. What amount of net unearned franchise fees would Potter report at December 31, 2020?

a. 400,000
b. 600,000
c. 610,000
d. 630,000

PROB. 15-10 (RPCPA)

Krebs Crabs, Inc. franchisor, entered into a franchise agreement with Liwayway Ligaya, franchisee, on July 1, 2020. The total franchise fees agreed upon is P1,100,000, of which P100,000 is payable upon signing and the balance payable

in four equal annual installments. It was agreed that the down payment is not refundable, notwithstanding lack of substantial performance of services by franchisor. When Krebs prepares its financial statements on July 31, 2020, the unearned franchise fees to be reported is:

a. 0
b. 100,000
c. 1,000,000
d. 1,100,000

PROB. 15-11 (Adapted)

On October 30, 2020, Dior Co. entered into franchise agreement with three franchisees. The agreements required an initial fee payment of P700,000 plus four P300,000 payments due every 2 months, the first payment due December 31, 2020. The present value of four equal periodic payments for each franchisee is P1,089,000. The initial deposit is refundable until substantial performance has been completed. The following information describes each agreement:

Franchisee	Probability of Full Collection	Services Performed at Dec. 31, 2020	Total Cost Incurred at Dec. 31, 2020
Manila Corp.	Likely	Substantial	P 750,000
Makati Corp.	Doubtful	25%	200,000
Ayala Co.	Doubtful	30%	1,000,000

Assuming P1,000,000 was received from each franchisee during 2020, what amount of franchise revenue would be reported in 2020?

a. 5,367,000
b. 3,467,000
c. 2,100,000
d. 1,039,000

PROB. 15-12 (Author)

On January 1, 2020, an entity granted a franchise to a franchisee. The franchise agreement requires the franchisee to pay a nonrefundable upfront fee in the amount of P400,000 and on-going payment of royalties equivalent to 5% of the

sales of the franchisee. The franchisee paid the nonrefundable upfront fee on January 1, 2020.

In relation to the nonrefundable upfront fee, the franchise agreement requires the entity to render the following performance obligations:

- To construct the franchisee's stall with stand-alone selling price of P200,000.
- To deliver 10,000 units of raw materials to the franchisee with stand-alone selling price of P250,000.
- To allow the franchisee to use the entity tradename for a period of 10 years starting January 1, 2020 with stand-alone selling price of P50,000.

On June 30, 2020, the entity completed the construction of the franchisee's stall. As of December 31, 2020, the entity was able to deliver 3,000 units of raw materials to the franchisee. For the year ended December 31, 2020, the franchisee reported sales revenue amounting to P100,000.

The entity determines that the performance obligations are separate and distinct from one another.

a. What is the amount of nonrefundable upfront fee to be allocated to the construction of the franchisee's stall?
   a. 200,000
   b. 160,000
   c. 250,000
   d. 120,000

b. What is the amount of revenue to be recognized in relation to the use of delivery of raw materials for the year ended December 31, 2020?
   a. 75,000
   b. 200,000
   c. 60,000
   d. 100,000

c. What is the amount of revenue to be recognized in relation to the use of entity's tradename for the year ended December 31, 2020?
   a. 5,000
   b. 4,000
   c. 50,000
   d. 10,000

d. What is the total revenue to be recognized by the entity for the year ended December 31, 2020?
   a. 229,000
   b. 220,000
   c. 285,000
   d. 224,000

PROB. 15-13 (Author)

On January 1, 2020, an entity granted a franchise agreement to a franchisee. The contract provides that the franchisee shall pay an initial franchise fee of P500,000 and on-going payment of royalties equivalent to 8% of the sales of the franchisee.

On January 1, 2020, the franchisee paid downpayment of P200,000 and issued a 3-year non-interest bearing note for the balance payable in three equal annual installments starting December 31, 2020. The note has present value of P240,183 with effective interest rate of 12%.

As of June 30, 2020, the entity completed the performance obligation of the franchise at a cost of P352,146. Aside from that, the entity incurred indirect cost of P22,009.

The franchisee started operation on July 1, 2020 and reported sales revenue amounting to P50,000 for the year ended December 31, 2020. The franchisee paid the first installment on its due date.

a. If the collection of the note receivable is reasonably assured, what is the gross profit to be recognized by the entity for the year ended December 31, 2020 in relation to the initial franchise fee?
   a. 66,028
   b. 44,014
   c. 22,009
   d. 88,037

b. If the collection of the note receivable is reasonably assured, what is the net income to be reported by the entity for the year ended December 31, 2020?
   a. 98,850
   b. 94,850
   c. 70,028
   d. 92,037

c. If the collection of the note receivable is not reasonably assured, what is the gross profit to be recognized by the entity for the year ended December 31, 2020 in relation to the initial franchise fee?
   a. 60,028
   b. 54,236
   c. 56,009
   d. 45,037

d. If the collection of the note receivable is not reasonably assured, what is the net income to be reported by the entity for the year ended December 31, 2020?
   a. 62,850
   b. 64,150
   c. 65,049
   d. 61,037

ANSWERS – Theory of Accounts

TOA 15-1 *Suggested answer (c) Franchise license and equipment*

The promise to grant a license and promise to transfer equipment are distinct. The license and the equipment are not highly interrelated or highly interdependent because these promises can be fulfilled independently. Thus, the entity has two performance obligations: Franchise license and Equipment.

TOA 15-2 *Suggested answer (b) Wholesaler – service sponsor*

The following are the types of franchising arrangements:

1. *Manufacturer-Wholesaler – where the franchisee under license manufactures and distributes the franchisor's products..*
2. *Manufacturer-Retailer – where the retailer as franchisee sells the franchisor's product directly to the public.*
3. *Wholesaler-Retailer – where the retailer as franchisee purchases products for retail sale from a franchisor wholesaler.*
4. *Service sponsor-Retailer – a system of service product delivery in which an entity producing a service sets up a number of independently-owned franchisee outlets in locations convenient to its customers.*

TOA 15-3 *Suggested answer (d) Initial franchise fee and Continuing franchise fee*

IFRS 15 identifies these two sources of franchise revenue, such as: Initial franchise fee and Continuing franchise fee.

TOA 15-4 *Suggested answer (d) All of these...*

Note: See Continuing franchise fee, Bargain purchase option, and Option to purchase the franchisee's outlet sections in this chapter.

TOA 15-5 *Suggested answer (a) As revenue when earned and receivable from the franchisee.*

Continuing franchise fees shall be reported as revenue as the fees are earned and become receivable from the franchisee. Cost relating to continuing franchise fee shall be expensed as incurred.

TOA 15-6 *Suggested answer (d) When performance obligations are satisfied*

Step 5 of the revenue model provides that revenue is recognized when or as the entity satisfies performance obligations.

TOA 15-7 *Suggested answer (b)Record portion of the initial franchise fee as unearned revenue which will increase the selling price when the franchisee subsequently makes the bargain purchases.*

The franchise agreement may provide for the franchisor to supply equipment, inventories, or other tangible assets, at a price lower than that charged to others or a price that does not provide a reasonable profit on those sales, in which case, part of the initial fee, sufficient to cover estimated costs in excess of that price and to provide a reasonable profit on those sales, is deferred and accounted for as an adjustment of the selling price when the franchisee purchases the equipment or supplies. (See: Bargain purchase option section in this chapter.)

TOA 15-8 *Suggested answer (a)*

If at the time the option is given it is probable that the franchisor will acquire the franchisee's outlet, the initial franchise fee shall be deferred as revenue. When the option is exercised, the deferred amount shall reduce the franchisor's investment in the outlet purchased. (See: Option to Purchase the Franchise Outlet section in this chapter.)

SOLUTIONS - Problems

PROB. 15-1 *Suggested answer (b) Equipment P1.5m, Franchise license P200,000*

The transaction price includes fixed consideration for the equipment and variable consideration of 5% of customer sales. The variable consideration (sale-based royalty) should be allocated entirely to the franchise license because it relates entirely to the promise to grant the franchise license. In addition, allocating P1.5m to equipment and the sale-based royalty to the franchise license would be consistent with an allocation based on entity's relative stand-alone selling prices in similar contracts.

PROB. 15-2 *Suggested answer (b)*

Amount due (1,800,000 – 520,000)	1,280,000
Less Present value of payments	1,014,000
Unearned interest income	266,000
Bargain purchase option (80,000 – 60,000)	20,000
Advertising (1,500 x 60)	90,000
Unearned franchise fee	110,000

Cash	520,000	
Notes receivable	1,280,000	
Unearned interest income		266,000
Unearned franchise fee		110,000
Revenue from franchise fee (1.8m – 376,000)		1,424,000

The following may reduce the amount of initial franchise fee that is recognized as revenue:

1. *Bargain purchase option*
2. *Option to purchase the franchisee's outlet*

3. *Interest revenue on the future installments*
4. *Designated amount of franchise fee for specific purpose (e.g. advertising)*

At the date of signing the agreement, the allocated amount of the initial franchise fee for interest, bargain purchase option, and advertising are unearned.

PROB. 15-3

Amount due (3,000,000 – 1,000,000)	2,000,000
Less Present value of payments	1,043,300
Unearned interest income	956,700

1. Suggested answer (c)

Cash	1,000,000	
Notes receivable	2,000,000	
Unearned interest income		956,700
Unearned franchise fee		120,000
Revenue from franchise fee (3m – 1,076,700)		1,923,300

The initial franchise fee is allocated to interest revenue on future installments and training services.

2. *Suggested answer (a)*

Unearned franchise revenue	1,923,300	
Unearned service revenue – training (120,000 x 3/12)	30,000	
Franchise revenue		1,923,300
Service revenue – training		30,000

Services related to franchise rights required of the franchisor has been partially performed on April 1, 2020 (date of commencement of operations). The franchisor provides one year of training services beginning on the signing date.

3. *Suggested answer (c)*

Unearned service revenue – training (120,000 x 9/12)	90,000	
Service revenue – training		90,000

The remaining unearned service revenue – training has been substantially performed by the franchisor at year end which is the end of one year training services required of the franchisor.

PROB. 15-4 *Suggested answer (c)*

DR: Cash	*76,000*	
CR: Franchise fee revenue		*70,000*
CR: Revenue from continuing franchise fee		*4,800*
CR: Unearned franchise fee		*1,200*

The initial franchise fee in the amount of P70,000 is earned because the requirements has been substantially performed by the franchisor; however, 20% of the continuing franchise fee (20% x 6,000 = 1,200) should be classified as unearned because this amount shall be spent on advertising. Therefore, only 60% of the continuing franchise fee is earned as franchise fee.

PROB. 15-5 *Suggested answer* (d)

Cash	50,000	
Notes Receivable	50,000	
Unearned franchise fee		50,000
Franchise fee revenue		50,000

Given that the franchising agreement may be cancelled without the need of returning any portion of the franchise fee already paid nor the payment of any balance still unpaid, collection of which is not reasonably assured;

therefore, the installment method may be applied. Under this method, the revenue that must be recognized is in proportion to amount collected. Since no amount of franchise cost was provided, the entire amount received may be recognized as revenue, and the unpaid balance is recognized as unearned.

PROB. 15-6 *Suggested answer* (a) P 0

Again, FASB Statement No. 45 specifies that no revenue is to be recognized prior to ***substantial performance*** *of the services covered by the initial fee, which is in accordance with IFRS 15 that revenue is recognized when or as the entity satisfies a performance obligation. Given that Max Turkey will provide six months training of the franchisee's staff and employees, which will not be substantially performed before May 1, 2021, thus, as of December 31, 2020,* ***no amount*** *of these payments will be recognized as franchise revenue.*

PROB. 15-7 *Suggested answer (b) 72,315*

Total franchise fee	90,000
Less amount paid	18,000
Amount due	72,000
Present value of annual payments	58,315
Unearned interest income	13,685

Total franchise fee		90,000
Less: Unearned interest income	13,685	
Unearned franchise fee (20,000 – 16,000)	4,000	17,685
Net revenue franchise fee		72,315

Again, initial franchise fee is allocated to interest revenue for the future installments and bargain purchase option that is accounted as adjustment of the selling price of the equipment purchased.

Payment made upon signing of contract (P100,000/ 5)	P 20,000
Continuing franchise fee (1% x P500,000)	5,000
Earned franchise fee for the first year	P 25,000

*Franchise companies derive their income from one or both of the following sources: 1.) **Initial franchise fee**, and 2.) **Continuing franchise fee**. FASB Statement No. 45 provides that the initial franchise fee should not be recognized as revenue until the franchisor has substantially performed the services required to be performed.*

Given no cost of services to be provided by the franchisor, it cannot identify the services that are required of the franchisor. Note further that the franchise agreement provides that should the operation of the outlet prove to be unprofitable, the franchise may be cancelled with whatever obligation owing Hot Pizza, in connection with the P100,000 franchise fee, waived. Therefore, the entire amount of collected may be recognized as revenue.

PROB. 15-9 *Suggested answer* (c) P610,000

Total initial franchise fee (21 x P30,000)	P 630,000
Less estimated uncollectible amount on franchise that will default in additional payments (P10,000 x 2)	20,000
Net unrealized franchise fee	P 610,000

Since the franchisor has not yet performed the required services, the initial franchise fee should be recognized as unearned. The estimated uncollectible account (bad debts) is normally recorded when revenue had been recognized; thus, it is inappropriate, at this time, to record bad debts, instead, unearned franchise fee may be debited.

PROB. 15-10 *Suggested answer* (d) P1,100,000

*Again, FASB Statement No. 45 specifies that no revenue is to be recognized prior to **substantial performance** of the services covered by the initial fee, which is in accordance with IFRS 15 that revenue is recognized when or as*

the entity satisfies a performance obligation. Given that the franchisor shall provide substantial performance of services; it was assumed that at this time, the franchisor has not yet provided substantial performance of the required services; thus, the entire amount of franchise fee in the amount of P1,100,000 shall be reported as unearned.

PROB. 15-11 *Suggested answer* (d) P1,039,000

Initial deposit (Manila Corp.)	P 700,000
Present value of four equal annual payments	1,089,000
Franchise revenue	1,789,000
Less franchise cost	750,000
Franchise revenue	P 1,039,000

When the initial services are determined to be substantially performed, the revenue recognition method to be used depends on the probability of future cash collection. If the collection of the note is reasonably assured, the full accrual method would be used; however, if the collection of the note is doubtful, the installment method could be used. The circumstances in Manila Corp. imply that the full accrual method could be used. However, in Makati Corp. and Ayala Co. no revenue or income would be recognized, because of the doubtful collection and only partial completion of the services performed.

PROB. 15-12

a. *Suggested answer: (b) 160,000*

Allocated revenue to construction of stall (400,000 x 200,000/500,000)	160,000

b. *Suggested answer: (c) 60,000*

Revenue from delivery of raw materials [(400,000 x 250,000/500,000) x 3,000/10,000]	60,000

c. *Suggested answer: (b) 4,000*

Revenue from use of entity's trade name [(400,000 x 50,000/500,000)/ 10 yrs]	4,000

d. *Suggested answer: (a) 229,000*

Revenue from construction of stall (a)	160,000
Revenue from delivery of raw materials (b)	60,000
Revenue from the use of entity's trade name (c)	4,000
Revenue from contingent franchise fee (100,000 x 5%)	5,000
Total revenue for the year ended December 31, 2020	229,000

PROB. 15-13

a. *Suggested answer: (d) 88,037*

Cash down payment	200,000
Present value of note receivable	240,183
Initial franchise fee revenue	440,183
Less direct cost of initial franchise fee	352,146
Gross profit under accrual basis	88,037

b. *Suggested answer: (a) 98,850*

Gross profit under accrual basis		88,037
Add: Interest income for the year (240,183 x 12%)	28,822	
Contingent franchise fee (50,000 x 8%0	4,000	32,822
Total revenue		120,859
Less indirect cost – expense as incurred		22,009

Net income under accrual basis	98,850

c. *Suggested answer: (b) 54,236*

Cash down payment	200,000
Present value of note receivable	240,183
Initial franchise fee revenue	440,183
Less direct cost of initial franchise fee	352,146
Gross profit under accrual basis	88,037
Divide by initial franchise fee revenue	440,183
Gross profit rate of initial franchise fee revenue	20%
Realized gross profit under installment method [(200,000) + (100,000 – 28,822) x 20%]	54,236

d. *Suggested answer: (c) 65,049*

Realized gross profit under installment method		54,236
Add: Interest income for the year 2020		
(240,183 x 12%)	28,822	
Contingent franchise fee (50,000 x 8%)	4,000	32,822
		87,058
Total		22,009
Less indirect costs – expensed as incurred		65,049
Net income under installment method		

Chapter 16

INSTALLMENT SALES

Note: The authors decided to include this chapter on Installment Sales for CPA board examination purposes. However, upon the full implementation of IFRS 15, Revenue from Contracts with Customers, this chapter will no longer be applicable and will not be included for the next edition of this book.

Introduction

Generally, the point of sale is the point of revenue recognition. And among the exceptions to the point of sale realization concept is the installment method. Under this method, income is recognized when collections are made, because the uncertainty of collecting accounts to be receive over an extended period of time may suggest the postponement of revenue recognition until the probability of collection can be reasonably estimated.

COST RECOVERY METHOD

Also included in this chapter is the *cost recovery method*, which is used when there is considerable uncertainty in the collection of a receivable; thus, considered to be the most conservative revenue recognition method. Under this method, at the date of sale transaction, revenue and cost of sales are both recognized, while the gross profit associated with the sale is initially deferred; that is, all cash received from the customer is applied to recover the cost of goods sold.

GROSS PROFIT RECOGNITION ON INSTALLMENT SALES

Installment sales may be regarded as calling for special treatment whereby gross profit is related to the periods in which the installment receivables are collected rather than to the periods in which the receivables are created. The *inflow of cash* (collections) rather than the time of sale become the criterion for revenue recognition. Accounting for installment method or installment basis could be best illustrated by providing for the recognition of gross profit in proportion to collections. Under this method, collections are regarded as both return of cost and realization of profit in the ratio in which these two factors are found in the original sales price.

In applying the installment method in the accounts, the difference between the contract sales price and the cost of goods sold is recorded as *deferred gross profit*. This balance is recognized as revenue periodically in the proportion that the cash collections of the period bear to sales price. Stated differently, the original gross profit percentage on the sales is applied to periodic collections in arriving at the amounts to be recognized as revenue. At the end of each period a deferred gross profit balance remains on the books and is equal to the gross profit percentage applied to the balance of installment receivables as of this date.

Gross Profit Rate

Since, collections become the criterion for revenue recognition in installment method of accounting, determination of *gross profit rate* is an important factor to compute the realized gross profit to be reported for a period. Gross profit rate may be computed based on the data provided. Normally, it may be computed by dividing the gross profit by the installment sales.

However, if this formula is not applicable, gross profit rate may also be computed by dividing the deferred gross profit (beginning) by the installment accounts receivable (beginning); or by dividing the deferred gross profit (end) by the installment accounts receivable (end).

Realized Gross Profit

The installment method of accounting recognizes profits at the point of collections, thus realized profit is based on amount collected. Ordinarily, *realized gross profit* may be computed by multiplying the gross profit rate by the amount collected. It should be pointed out that in case of defaulted contract, collections should be net of any unpaid balance on defaulted contract. However, if this formula is not applicable, realized gross profit may be computed by determining the difference between the *deferred gross profit (before adjustment)* and *deferred gross profit (after adjustment).*

Deferred Gross Profit

As stated earlier, the installment method of accounting recognizes profits at the point of collection. If realized profit is based on amount collected, the deferred gross profit is based on unpaid balance. The deferral of gross profit is, in effect, the deferral of

sales revenue accompanied by the deferral of cost of goods sold related to such sales revenue. To compute the deferred gross profit at the beginning of a period (*before adjustment*), installment accounts receivable at the beginning of the period should be multiplied by the related gross profit rate; and the deferred gross profit at the end of the period (*after adjustment*) is equal to installment accounts receivable multiplied by the related gross profit rate.

Trade-Ins

In certain sales on the installment plan, companies will accept a trade-in as part of payment on a new contract. The trade-in is recorded at the value allowed. Frequently, as a special sales inducement, an overallowance is given on the trade-in, which is, in effect, a reduction in the sales price. Under such circumstances, the trade-in should be recorded at no more than the company would pay on its purchase; the difference between the amount allowed and the value of the article to the company should be reported either as charge to an overallowance account or as a reduction in installment sales. In either case, the gross profit on installment sales should be regarded as the difference between the cost of goods sold and net sales, the total installment sales less any trade-in overallowance.

Defaults and Repossessions

Default on an installment contract and subsequent repossession of the goods sold calls for an entry on the books of the seller that reports the merchandise reacquired, cancels the installment receivable together with the related deferred gross profit balance, and records the gain or loss on repossession. As in the case of goods acquired by trade-in, the repossessed article should be recorded at an amount that will permit a normal gross profit on its resale.

Interest on Installment Contracts

Installment contracts frequently provide for a charge for interest on the balance due. The interest charge is ordinarily payable with the installment payment that reduces the principal. Although interest is included in the payment, use of the installment method requires that only that portion of a payment which reduces the principal balance of the installment contract receivable should be considered in computing the realized gross profit.

MULTIPLE CHOICE – Theory of Accounts

TOA 16-1 (AICPA)

Under the cost recovery method of revenue recognition,

a. Income is recognized on a proportionate basis as cash is received on the sale of the product.
b. Income is recognized when the cash received from the sale of the product is greater than the cost of the product.
c. Income is recognized immediately.
d. None of these.

TOA 16-2 (Adapted)

Which of the following are recognized each period under the cost recovery method?

a. Costs only
b. Revenues only
c. Both costs and revenues
d. None of these

TOA 16-3 (AICPA)

Chris Co. sells equipment on installment contracts. Which of the following statements best justifies Chris' use of the cost recovery method of revenue recognition to account for these installment sales?

a. The sales contract provides that title to the equipment passes to the buyer only when all payments have been made.
b. No cash payments are due until one year from the date of sale.
c. Sales are subject to a high rate of return.
d. There is no reasonable basis for estimating collectability.

TOA 16-4 (AICPA)

Winner Co. is engaged in extensive exploration for water in Utah. If, upon discovery of water, Winner does not recognize any revenue from water sales

until the sales exceed the costs of exploration, the basis of revenue recognition being employed is the

a. Production basis
b. Cash (or collection) basis
c. Sales (or accrual) basis
d. Cost recovery basis

TOA 16-5 (AICPA)

The installment method of recognizing profit for accounting purposes is acceptable if

a. Collections in the year of sale do not exceed 30% of the total sales price.
b. An unrealized profit account is credited.
c. Collection of the sales price is not reasonably assured.
d. The method is consistently used for all sales of similar merchandise.

TOA 16-6 (AICPA)

Under the installment sales method,

a. Revenue, costs, and gross profit are recognized proportionately to the cash that is received from the sale of the product.
b. Gross profit is deferred proportionately to cash uncollected from sale of the product, but total revenue and costs are recognized at the point of sale.
c. Gross profit is not recognized until the amount of cash received exceeds the cost of the item sold.
d. Revenues and costs are recognized proportionately to the cash received from the sale of the product, but gross profit is deferred until all cash is received.

TOA 16-7 (AICPA)

Leopard Co. uses the installment sales method to recognize revenue. Customers pay the installment notes in 24 equal monthly amounts, which include 12% interest. What is the balance of an installment note receivable 6 months after the sale?

a. 75% of the original sales price.
b. Less than 75% of the original sales price.

c. The present value of the remaining monthly payments discounted at 12%.
d. Less than the present value of the remaining monthly payments discounted at 12%.

TOA 16-8 (AICPA)

Cash collection is a critical event for income recognition in the

	Cost recovery method	Installment method
a.	No	No
b.	Yes	Yes
c.	No	Yes
d.	Yes	No

TOA 16-9 (IFRS)

According to IAS 18, Revenue, which two of the following criteria must be satisfied before revenue from the sale of goods should be recognized in profit or loss?

1. Revenue can be measured reliably.
2. Managerial control over the goods sold has been relinquished.
3. Ownership has been transferred to the buyer.
4. The outcome of the transaction is certain.

a. 1 and 2
b. 1 and 3
c. 1 and 4
d. 3 and 4

TOA 16-10 (Adapted)

When assets that have been sold and accounted for by the installment method are subsequently repossessed and returned to inventory, they should be recorded on the books at

a. Selling price.
b. The amount of the installment receivable less associated deferred gross profit.
c. Net realizable value.
d. Net realizable value minus normal profit.

TOA 16-11 (Adapted)

The method most commonly used to report defaults and repossessions is

a. Provide no basis for the repossessed asset thereby recognizing a loss.
b. Record the repossessed merchandise at fair value, recording a gain or loss if appropriate.
c. Record the repossessed merchandise at book value, recording no gain or loss.
d. None of these.

MULTIPLE CHOICE – Problems

PROB. 16-1 (AICPA)

On January 2, 2019, Colt Co. sold land that cost P600,000 for P800,000, receiving a note bearing interest at 10%. The note will be paid in three annual installments of P321,700 starting on December 31, 2019. Because collection of the note is very uncertain, Colt will use the cost recovery method. How much revenue from this sale should Colt recognize in 2019?

a. 0
b. 6,000
c. 8,000
d. 20,000

PROB. 16-2 (AICPA)

The following information pertains to a sale of real estate by South Co. to Nord. Co. on December 31, 2019:

Carrying amount		4,000,000
Sales price:		
Cash	600,000	
Purchase money mortgage	5,400,000	6,000,000

The mortgage is payable in nine annual installments of P600,000 beginning December 31, 2020, plus interest of 10%. The December 31, 2020 installment was paid as scheduled, together with interest of P540,000. South uses the cost recovery method to account for the sale. What amount of income should South recognize in 2020 from the real estate sale and its financing?

a. 1,140,000
b. 740,000
c. 540,000
d. 0

PROB. 16-3 (AICPA)

Several of Pitt, Inc.'s customers are having cash flow problems. Information pertaining to these customers for the years ended March 31, 2019 and 2020 follows:

	2019	2020
Sales	10,000	15,000
Cost of sales	8,000	9,000
Cash collections:		
On 2019 sales	7,000	3,000
On 2020 sales		12,000

If the cost recovery method is used, what amount would Pitt report as gross profit from sales to these customers for the year ended March 31, 2020?

a. 2,000
b. 3,000
c. 5,000
d. 15,000

PROB. 16-4 (AICPA)

On December 31, 2019, Mill Co. sold construction equipment to Drew, Inc. for P1,800,000. The equipment had a carrying amount of P1,200,000. Drew paid P300,000 cash on December 31, 2019 and signed a P1,500,000 note bearing interest at 10%, payable in five annual installments of P300,000. Mill appropriately accounts for the sale under the installment method. On December 31, 2020, Drew paid P300,000 principal and P150,000 interest. For the year ended December 31, 2020, what total amount of revenue should Mill recognize from the construction equipment sale and financing?

a. 250,000
b. 150,000
c. 120,000
d. 100,000

PROB. 16-5 (AICPA)

Hill Company began operations on January 1, 2019, and appropriately uses the installment method of accounting. Data available for 2019 are as follows:

Installment accounts receivable, 12/31/2019	500,000
Installment sales	900,000
Cost of goods sold, as percentage of sales	60%

Using the installment method, Hill's realized gross profit for 2019 would be

a. 360,000
b. 240,000
c. 200,000
d. 160,000

PROB. 16-6 (RPCPA)

The Central Plains Subdivision sells residential subdivision lots in installment. The following information was taken from the accounting records of Central Plains Subdivision as at December 31, 2019:

Installment accounts receivable, 1/1/2019	755,000
Installment accounts receivable, 12/31/2019	840,000
Unrealized gross profit, 1/1/2019	339,750
Installment sales	950,000

How much is the realized gross profit in 2019?

a. 427,500
b. 339,750
c. 378,000
d. 389,250

PROB. 16-7 (Adapted)

On October 1, 2020, Surplus Co. sold equipment on installment basis. The equipment costs the company an amount of P600,000, but the installment selling price was set at P850,000. The terms of payment included the acceptance of a used equipment with the balance to be paid in ten (10) monthly installment due at the end of each month commencing the month of sale. It would require P12,500 to recondition the used equipment so that it could be sold for P250,000. A 15% gross profit was usual from sale of used equipment.

What is the realized gross profit from the 2020 collections?

a. 70,588
b. 80,000
c. 100,000
d. 340,000

PROB. 16-8 (AICPA)

On January 2, 2019, Easy Pay Co. sold a plant to Menchie Co. for P1,500,000. On that date, the plant's carrying amount was P1,000,000. Menchie gave Easy Pay P300,000 cash and a P1,200,000 note, payable in four annual installments of P300,000 plus 12% interest. Menchie made the first principal and interest payment of P444,000 on December 31, 2019. Easy Pay uses the installment method of revenue recognition. In its 2019 income statement, what amount of realized gross profit should Easy Pay report?

a. 344,000
b. 200,000
c. 148,000
d. 100,000

PROB. 16-9 (AICPA)

Luge Co., which began operations on January 2, 2019, appropriately uses the installment method of accounting. The following information is available for 2019:

Installment accounts receivable December 31, 2019	800,000
Deferred gross profit, Dec. 31 (before Recognition of realized gross profit for 2019)	560,000
Gross profit on sales	40%

For the year ended December 31, 2019, cash collections and realized gross profit on sales should be

	Cash Collections	Realized Gross Profit
a.	400,000	320,000
b.	400,000	240,000
c.	600,000	320,000
d.	600,000	240,000

PROB. 16-10 (Adapted)

In its first year of operations, Giant Corp. reported cost of goods sold in the amount of P900,000 and sales were as follows:

	Mark-up on cost	Sales
Cash basis	25%	250,000
Charge basis	33 1/3%	400,000
Installment basis	50%	600,000

If collections on installment sales during the year amounted to P240,000, how much was the total gross profit realized at the end of the year?

a. 50,000
b. 60,000
c. 80,000
d. 230,000

PROB. 16-11 (RPCPA)

The books of Paiyakan Company show the following balances on December 31, 2019:

Accounts receivable	313,750
Deferred gross profit (before adjustment)	38,000

Analysis of the accounts receivable reveal the following:

Regular accounts	207,500
2018 installment accounts	16,250
2019 installment accounts	90,000

Sales on an installment basis in 2018 were made at 30% above cost; in 2019, at 33 1/3% above cost. Expenses paid was P1,500 relating to installment sales. How much is the net income on installment sales?

a. 11,000
b. 11.500
c. 16,000
d. 10,250

PROB. 16-12 (AICPA)

Watson Co. sold some machinery to the Finney Co. on January 2, 2019. The cash selling price would have been P473,850. Finney entered into an installment sales contract which required annual payments of P125,000, including interest at 10% over five years. The first payment was due on December 31, 2019. What amount of interest income should be included in Watson's 2020 income statement (the second year of the contract)?

a. 12,500
b. 39,624
c. 25,000
d. 34,885

PROB. 16-13 (AICPA)

Rosson corp., which began business on January 1, 2019, appropriately uses the installment sales method of accounting for income tax reporting purposes. The following data are available for 2019:

Installment accounts receivable, 12/31/2019	200,000
Installment sales for 2019	350,000
Gross profit on sales	40%

Under the installment sales method, what would be Rosson's deferred gross profit at December 31, 2019?

a. 120,000
b. 90,000
c. 80,000
d. 60,000

PROB. 16-14 (AICPA)

Karr Co. began operations on January 1, 2019 and appropriately uses the installment method of accounting. The following information pertains to Karr's operations for 2019:

Installment sales	800,000
Cost of installment sales	480,000
General and administrative expenses	80,000
Collections on installment sales	300,000

The balance in the deferred gross profit account at December 31, 2019 should be

a. 120,000
b. 150,000
c. 200,000
d. 320,000

PROB. 16-15 (RPCPA)

The Brownout, Inc., began operating at the start of the calendar year 2019, uses the installment method of accounting:

Installment sales	400,000
Gross margin on cost	66 2/3%
Inventory, December 31, 2019	80,000
General & administrative expense	40,000
Accounts receivable, December 31, 2019	320,000

The balance of the deferred gross profit account at December 31, 2019 should be:

a. 192,000
b. 128,000
c. 96,000
d. 80,000

PROB. 16-16 (AICPA)

Lane Co., which began operations on January 1, 2019, appropriately uses the installment method of accounting. The following information pertains to Lane's operations for the year 2019:

Installment sales	1,000,000
Regular sales	600,000
Cost of installment sales	500,000
Cost of regular sales	300,000
General and administrative expenses	100,000
Collections on installment sales	200,000

The deferred gross profit account in Lane's December 31, 2019 balance sheet should be

a. 150,000
b. 320,000
c. 400,000
d. 500,000

PROB. 16-17 (AICPA)

On January 2, 2019, Blake Co. sold a used machine to Cooper Inc. for P900,000 resulting to a gain of P270,000. On that date, Cooper paid P150,000 cash and signed a P750,000 note bearing interest at 10%. The note was payable in three annual installments of P250,000 beginning January 2, 2020. Blake appropriately accounted for the sale under the installment method. Cooper made a timely payment of the first installment on January 2, 2020, of P325,000, which included accrued interest of P75,000. What amount of deferred gross profit should Blake report at December 31, 2020?

a. 150,000
b. 172,500
c. 180,000
d. 225,000

PROB. 16-18 (AICPA)

Lang Co. uses the installment method of revenue recognition. The following data pertain to Lang's installment sales for the year ended December 31, 2019 and 2020:

	2019	2020
Installment receivables at year end on 2019 sales	60,000	30,000
Installment receivables at year end on 2020 sales		69,000
Installment sales	80,000	90,000
Cost of sales	40,000	60,000

What amount should Lang report as deferred gross profit in its December 31, 2020 balance sheet?

a. 23,000
b. 33,000
c. 38,000
d. 43,000

PROB. 16-19 (AICPA)

Since there is no basis for estimating the degree of collectability, Astor Co. uses the installment method of revenue recognition for the following sales:

	2020	2019
Sales	900,000	600,000
Collections from:		
2019 sales	100,000	200,000
2020 sales	300,000	-
Accounts written off:		
2019 sales	150,000	50,000
2020 sales	50,000	-
Gross profit percentage	40%	30%

What amount should Astor report as deferred gross profit in its December 31, 2020 balance sheet for the 2019 and 2020 sales?

a. 150,000
b. 160,000
c. 225,000
d. 250,000

PROB. 16-20 (RPCPA)

A company uses the installment method of accounting to recognize income, and pertinent data are as follows:

	2017	2018	2019
Installment sales	300,000	375,000	360,000
Cost of sales	225,000	285,000	252,000
Balance of gross Profit at year-end:			
2017	52,500	15,000	-
2018		54,000	9,000
2019			72,000

The balance of the receivable on December 31, 2019 is:

a. 270,000
b. 277,500
c. 279,000
d. 300,000

PROB. 16-21 (AICPA)

Taft Corp., which began business on January 1, 2019, appropriately uses the installment sales method of accounting. The following data are available for December 31, 2019 and 2020:

	2019	2020
Balance of deferred gross profit on sales account:		
2019	300,000	120,000
2020	-	440,000
Gross profit on sales	30%	40%

The installment accounts receivable balance at December 31, 2020 is

a. P1,000,000
b. 1,100,000
c. 1,400,000
d. 1,500,000

PROB. 16-22 (AICPA)

Dolce Co., which began operations on January 1, 2019, appropriately uses the installment method of accounting record revenues. The following information is available for the years ended December 31, 2019 and 2020:

	2019	2020
Sales	1,000,000	2,000,000
Gross profit realized on sales made in:		
2019	150,000	90,000
2020		200,000
Gross profit percentage	30%	40%

What amount of installment accounts receivable should Dolce report in its December 31, 2020, balance sheet?

a. 1,225,000
b. 1,300,000
c. 1,700,000
d. 1,775,000

PROB. 16-23 (RPCPA)

Quincy Enterprises uses the installment method of accounting and has the following data at year-end:

Gross margin on cost	66 2/3%
Unrealized gross profit	192,000
Cash collections including down payments	360,000

What was the total amount of sale on installment basis?

a. 480,000
b. 552,000
c. 648,000
d. 840,000

PROB. 16-24 (AICPA)

Baker Co. is a real estate developer that began operations on January 2, 2019. Baker appropriately uses the installment method of revenue recognition. Baker's sales are made on the basis of a 10% down payment, with the balance payable over 30 years. Baker's gross profit percentage is 40%. Relevant information for Baker's first two years of operations is as follows:

	2020	2019
Sales	16,000,000	14,000,000
Cash collections	2,020,000	1,400,000

a. At December 31, 2019, Baker's deferred gross profit was
   a. 5,040,000
   b. 5,600,000
   c. 8,400,000
   d. 12,600,000

b. Baker's realized gross profit for 2020 was
   a. 6,400,000
   b. 2,020,000
   c. 1,212,000
   d. 808,000

PROB. 16-25 (Adapted)

The Samsing Music Corp. sells musical instruments on installment. On October 1, 2019, Samsing sold a karaoke costing P15,000 for P24,000. It has been the policy of Samsing to require its customers a down payment of P2,400 for this kind of instrument and the balance to be paid on installment with an annual interest of 12% starting October 31, 2019. Periodic payments are equal in amount and represent interest on the balance of the principal owed between installment periods, the remainder a reduction in the principal balance.

The karaoke was repossessed in February 2020, when the customer defaulted after paying a total of P9,600. It was estimated that the karaoke had a depreciated cost of P8,400 when repossessed. The Samsing Music Corp. uses perpetual inventory account and enters the total deferred gross profit at the time of sale. How much is the total realized gross profit from this sale (rounded to the nearest peso)?

a. 2,411
b. 3,312
c. 4,356
d. 4,500

PROB. 16-26 (AICPA)

Pacific Corp. uses the installment method of reporting. The following data were gathered for its three years of operations:

	2018	2019	2020
Installment sales	300,000	405,000	495,000
Cost of installment sales	210,000	243,000	321,750
Gross profit rate	30%	40%	35%
Balance of installment receivable, Dec. 31:			
2018 installment sales	180,000	135,000	60,000
2019 installment sales		300,000	195,000
2020 installment sales			390,000

In 2020, a customer defaulted; accordingly, the merchandise with an estimated value of P15,000 was repossessed. The sale was made in 2018 and the unpaid balance on the date of repossession was P22,500.

a. What is the total realized gross profit in 2020?
   a. 412,500
   b. 183,750
   c. 94,500
   d. 36,750

b. What is the amount of gain (loss) on repossession in 2020?
   a. (7,500)
   b. (750)
   c. 6,000
   d. 3,000

PROB. 16-27 (RPCPA)

The Zonyo Company on October 1, 2019, sold article "A" for P4,000, costing P2,700. Article "B", a used article was accepted as down payment and the balance on a monthly installment payment of P200 starting November 1, 2019. P1,200 was allowed on the article traded-in. The company estimates reconditioning cost of P80 on this article and a sales price of P1,100 after such reconditioning. The company normally expects 20% gross profit on sale of used articles. The company employs the perpetual method of inventory.

On April 1, 2020, the customer defaulted in the payment of installment. Article "A" which was sold was repossessed; its value to the seller is P1,350 allowing for reconditioning cost and a normal gross profit on resale.

a. The amount of realized gross profit in 2019 is:
   a. 300
   b. 400
   c. 415
   d. 350

b. The amount of loss on repossession is:
   a. 415
   b. 300
   c. 450
   d. 350

PROB. 16-28 (AICPA)

Wood Corp. has a normal gross profit on installment sales of 30%. A 2018 sale resulted in a default early in 2020. At the date of default, the balance of the installment receivable was P8,000, and the repossessed merchandise had a fair value of P4,500. Assuming the repossessed merchandise is to be recorded at fair value, the gain or loss on repossession should be

a. 0
b. 1,100 loss
c. 1,100 gain
d. 2,500 loss

PROB. 16-29 (AICPA)

Gentry Co. uses the installment sales method. When an account had a balance of P3,500, no further collections could be made and the dining room set was repossessed. At that time, it was estimated that the dining room set could be sold for P1,000 as repossessed, or for P1,300 if the company spent P125 reconditioning it. The gross profit rate on this sale was 70%. What is the gain or loss on repossession?

a. 2,450 loss
b. 2,500 loss
c. 300 gain
d. 125 gain

ANSWERS – Theory of Accounts

TOA 16-1 *Suggested answer (b) Income is recognized when the cash received from the sale of the product is greater than the cost of the product.*

Under the cost recovery method, gross profit is deferred and recognized only when the cumulative receipts exceed the cost of the asset sold.

TOA 16-2 *Suggested answer (c) Both costs and revenues*

Under the cost recovery method, revenue and cost are recognized during the production, but gross profit is deferred until all costs are incurred.

TOA 16-3 *Suggested answer (d) There is no reasonable basis for estimating collectability.*

Ordinarily, revenues should be accounted for when a transaction is completed, with appropriate provision for uncollectible accounts. However, when there is no reasonable basis for estimating the degree of collectability, either the installment method or the cost recovery method may be used. The cost recovery method recognizes profit only after collections exceeded the cost of the item sold.

TOA 16-4 *Suggested answer (d) Cost recovery basis*

Under the cost recovery method, no profit of any type is recognized until the cumulative receipts (principal and interest) exceed the cost of the asset sold.

TOA 16-5 *Suggested answer (c) Collection of the sales price is not reasonably assured.*

Generally, the profit on sale in the ordinary course of business is considered to be realized at the time of sale unless it is uncertain whether the sale price will be collected. Thus, if collection of the sales price is not reasonably assured, the installment method shall be used.

TOA 16-6 *Suggested answer (b)*

The installment method of accounting is used when there is a high degree of uncertainty regarding the collectability of the sales price. Under this method, ***sales revenues and the related cost of goods sold are recognized in the period of the sale. However, the gross profit is deferred to the periods in which cash is collected.***

TOA 16-7 *Suggested answer* (c)

The balance of an installment note receivable equals the unpaid balance of principal. The difference between the gross receivable and the unpaid principal is the interest. Therefore, ***the balance of the note is equal to the present value of the remaining payments discounted at the contract interest rate.***

TOA 16-8 *Suggested answer* (b) *Yes Yes*

The installment method is used when collection of the sales price is not reasonably assured. However, when the uncertainty of collection is so great that even the use of the installment method is precluded, then the cost recovery method may be used. Having no reasonable basis for estimating collectability would provide a great enough uncertainty to use the cost recovery method.

TOA 16-9 *Suggested answer (a) 1 and 2*

IAS 18 sets out five criteria that needed to be met before revenue from the sale of goods shall be recognized:

1. *The amount of revenue can be measured reliably.*
2. *The seller no longer has management involvement or effective control over the goods.*
3. *The significant "risks and rewards" of ownership have been transferred from the seller to the buyer.*
4. *It is probable that payment for the goods will be received by the entity*
5. *The cost incurred or to be incurred, in relation to the transaction, can be measured reliably.*

TOA 16-10 *Suggested answer* (d)

Repossessed merchandise returned to inventory should usually be recorded at their ***net realizable value minus normal profit.*** *Net realizable value is the selling price minus costs of completion, reconditioning, and disposal. Sales profit was deducted because it will be recognized upon resale.*

TOA 16-11 *Suggested answer (b)*

Default on an installment contract and subsequent repossession of the goods sold calls for an entry on the books of the seller that reports the merchandise reacquired at its fair value at the date of repossession, cancels the installment receivable together with the related deferred gross profit balance, and records the gain or loss on repossession if appropriate.

MULTIPLE CHOICE - Problems

PROB. 16-1 *Suggested answer (a) 0*

Under the cost recovery method, no profit of any type is recognized until the cumulative receipts (principal and interest) exceed the cost of the asset sold. The cost of P600,000 is not yet recovered 2019, thus no amount of revenue will be recognized.

PROB. 16-2 *Suggested answer* (d) P 0

Again, the cost recovery method recognizes profit only after collections exceed the cost of item sold, that is, when the full cost has been recovered. As of December 31, only P1,200,000 of the P4,000,000 cost has been recovered; thus, no income should be recognized.

PROB. 16-3 *Suggested answer* (c) P5,000

Collections on 2019 sales (7,000 + 3,000)	10,000	
Less cost of sales 2019	8,000	2,000
Collections on 2020 sales	12,000	
Less cost of sales 2020	9,000	3,000
Total gross profit		5,000

The cost recovery method recognizes profit only after collections exceed the cost of sales, that is, when the full cost has been recovered. Subsequent amounts collected are treated entirely as realized gross profit.

PROB. 16-4 *Suggested answer* (a) P250,000

Collection applying to principal	300000
Multiply by gross profit on sales [(1,800,000 - 1,200,000)/ 1,800,000]	33-1/3%
Realized gross profit, 2020	100,000
Interest income, 2020	150,000
Total amount of revenue, 2020	250,000

Again, under the installment method of accounting, any amount collected represents a combination of cost recovery and profit realization. Realized profit may be determined using the gross profit rate on sales applied to amount of collections during the period.

Installment contracts frequently provide for a charge for interest on the balance due. The interest charge is ordinarily payable with the installment payment that reduces the principal. Although interest is included in the payment, use of the installment method requires that only portion of payments applying to principal should be considered in computing the gross profit realized.

PROB. 16-5 *Suggested answer* (d) P160,000

Installment sales	900,000
Less installment accounts receivable, 12/31/2019	500,000
2019 collections	400,000
Multiply by gross profit on sales (100%-60%)	40%
Realized gross profit , 2019	160,000

Under the installment method of accounting, income is recognized when collections are made. The realized gross income is equal to the collections multiplied by the gross profit rate on sales. Each collection on a contract is regarded as representing both a return of cost and a realization of gross profit in the ratio in which these two factors are found in the original sales price. This method serves to spread the gross profit on installment sales over the full life of the installment contract. Continuing expenses on an installment contract are matched against the gross profit that is recognized in successive periods; the possible failure to realize the full amount of the gross profit in the event of default by the buyer is anticipated.

PROB. 16-6

Suggested answer (d) P389,250

Installment accounts receivable, 1/1/2019	755,000
Add installment sales	950,000
Total	1,705,000
Less installment accts. receivable, 12/31/2019	840,000
Collections in 2019	865,000
Multiply by gross profit rate on sale (339,750/ 755,000)	45%
Realized gross profit in 2019	389,250

Again, since at the end of each period, deferred gross profit balance is equal to the gross profit rate applied to the balance of installment receivables as of that date; an alternative procedure of calculating the gross profit rate on sales is by determining the ratio of unrealized gross profit at a certain period with the installment accounts receivable of the same period.

PROB 16-7 *Suggested answer (b) 80,000*

Trade-in value			300,000
Less actual value:			
Resale price		250,000	
Less: reconditioning cost	12,500		
normal gross profit (15% x 250,000)	37,500	50,000	200,000
Overallowance			100,000
Installment sales (850,000 – 100,000)			750,000
Less cost of installment sales			600,000
Gross profit (20%)			150,000
Down payments:			
Cash		50,000	
Actual value of traded in equipment		200,000	250,000
Add Installment collected (750,000 – 250,000/ 10 x 3)			150,000
Total collections			400,000
Multiply by adjusted GPR			20%
Realized gross profit			80,000

The excess of trade in value over the actual value of merchandise traded in (overallowance) is usually treated as deduction from the installment sales account, thereby changing the gross profit rate.

PROB. 16-8 *Suggested answer (b).200,000*

Gross profit (1,500,000 – 1,000,000)	500,000
Divide by selling price	1,500,000
Gross profit rate	33 1/3%

Amount paid at the date of sale	300,000
Add amount applying to principal at Dec. 31, 2019	300,000
Total collections applying to principal	600,000
Multiply by gross profit rate	33 1/3%
Realized gross profit	200,000

The installment method recognizes income on sale as the related receivable is collected. In case, collections include interest, it is the amount applying to principal which is the basis in determining the realized profit.

PROB. 16-9 *Suggested answer* (d) P600,000 P240,000

Installment sales (560,000/ 40%)	1,400,000
Less installment accounts Receivable 12/31/2019	800,000
Cash collections in 2019	600,000
Multiply by gross profit rate on sales	40%
Realized gross profit, 2019	240,000

Under installment method, periodic collection is regarded as representing both a recovery of cost and a realization of gross profit, and must be multiplied by gross profit rate on sale to determine the realized gross profit for the period.

PROB 16-10 *Suggested answer (d) 230,000*

Cash basis (250,000 x 25/125)	50,000
Charge basis (400,000 x 33 1/3 / 133 1/3)	100,000
Installment basis (240,000 x 50/150)	80,000
Total realized gross profit	230,000

Note that the installment method of accounting recognizes profits at the point of collections, therefore, the realized gross profit is based on the amount collected.

PROB. 16-11 *Suggested answer* (d) P10,250

Deferred gross profit (before adjustment)		38,000
Less deferred gross profit (after adjustment)		
2018 sales (16,250 x 30/130)	3,750	
2019 sales		
(90,000 x 33 1/3/ 133 1/3)	22,500	26,250
Realized gross profit		11,750
Less expenses relating to installment sales		1,500
Net income on installment sales		10,250

The computations of realized gross profit for a given period is not confined on the traditional computation by applying the gross profit percentage for the year in which the contract originated to the amounts collected on such contracts. An alternative procedure for calculating realized gross profit is by calculating the amount of deferred gross as of the end of the period and reducing the deferred gross profit account to this balance. Therefore, the difference between deferred gross profit before adjustment and deferred gross profit after adjustment is the realized gross profit.

PROB. 16-12 *Suggested answer (b) 39,624*

	Collections	10% Int.	Principal	Balance
Selling price				473,850
1st installment	125,000	47,385	77,615	396,235
2nd installment	125,000	**39,624**		

In case of long-term installment sales, collections shall be applied first to interest and the balance to principal.

PROB. 16-13 *Suggested answer* (c) P80,000

Installment accounts receivable, 12/31/2019	200,000
Multiply by gross profit rate on sales	40%
Deferred gross profit, 12/31/2019	80,000

Again, under the installment method of accounting, a deferred gross profit balance that remains on the books at the end of a period is equal to the gross profit percentage applied to the balance of installment receivable as of this date.

PROB. 16-14 *Suggested answer* (c) P200,000

Installment sales, 2019	800,000
Less collections on installment sales	300,000
Installment accounts receivable, 12/31/2019	500,000
Multiply by gross profit rate on sales [(800,000 - 480,000)/ 800,000]	40%
Deferred gross profit, 12/31/2019	200,000

Normally, the gross profit rate on sales may be determined by dividing the gross profit by sales. And since, deferred gross profit is the unrealized portion, the same should be applied to the uncollected portion of the total sales. This is in conformity with the point of collection revenue recognition principle.

PROB. 16-15 *Suggested answer* (b) P128,000

Accounts receivable, 12/31/2019	320,000
Multiply by gross profit rate on sales (66 2/3%/ 166 2/3%)	40%
Deferred gross profit, 12/31/2019	128,000

If under the point of collection revenue recognition principle, realized gross profit relates to collections during the period, the deferred gross profit relates to the amount to be collected in the future, and of course, with application of the related gross profit rate on sales.

PROB. 16-16 *Suggested answer* (c) P400,000

Installment sales	1,000,000
Less collections on installment sales	200,000
Installment accounts receivable, 12/31/2019	800,000
Multiply by gross profit rate on sales [(1,000,000 - 500,000)/ 1,000,000]	50%
Deferred gross profit, 12/31/2019	400,000

Realization principle means that revenue should be recognized when it is already earned regardless when it is received. Accordingly, the point of sale

is the point of revenue realization. The point of collection revenue recognition principle, which is an exception to the rule of point of sale, is applicable to the installment method of accounting, where profit may be realized only when collected, and therefore, any amount uncollected during the period, the related profit will be deferred.

In view of the foregoing, the deferred gross profit in question relates to installment sales only and not to regular sales, where revenue should be recognized when it is already earned regardless when received. Thus, transactions that pertain to regular sales were ignored for purposes of computing the deferred gross profit at a given period.

PROB. 16-17 *Suggested answer (a) 150,000*

Gross profit	270,000
Divide by selling price	900,000
Gross profit rate	30%
Total gross profit	270,000
Less realized gross profit from down payment (150,000 x 30%)	45,000
Balance	225,000
Less realized gross profit from 1st installment (250,000 x 30%)	75,000
Deferred gross profit, December 31, 2020	150,000

Again, installment method of accounting is a method of recognizing revenue at the point of collection; thus realization of which is based on the amount collected. Accordingly, any amount not yet collected is the basis in determining the deferred gross profit.

PROB. 16-18 *Suggested answer* (c) P38,000

	2019	2020
Gross profit rate:		
2019 sales (P40,000/ 80,000)	50%	
2020 sales (P30,000/ 90,000)		33 1/3%

Deferred gross profit , 12/31/2017:	
2019 sales (P30,000 x 50%)	15,000
2020 sales (P69,000 x 33 1/3/%)	23,000
Total	38,000

As mentioned earlier, the deferred gross profit at the end of the given period is equal to the installment accounts receivable in the same period applied to gross profit rate on sales.

PROB. 16-19 *Suggested answer* (d) P250,000

	2020	2019
Sales	900,000	600,000
Collections	(300,000)	(200,000)
		(100,000)
Write offs	(50,000)	(50,000)
		(150,000)
Installment accounts receivable, 12/31/20	550,000	100,000
Multiply by gross profit rate	40%	30%
Deferred gross profit, 12/31/20	220,000	30,000

If realized gross profit relates to collections applied to gross profit rate, deferred gross profit relates to installment accounts receivable applied to gross profit rate. To arrive at the correct balance of installment accounts receivable, it should be pointed out that any items which will affect the receivable account balance should be considered in the computations before the same will be applied to gross profit rate. Thus, the deferred gross profit should be P250,000 (220,000 + 30,000)

PROB. 16-20 *Suggested answer* (b) P277,500

	2018	2019
Installment sales	375,000 (100%)	360,000 (100%)
Cost of sales	285,000 (76%)	252,000 (70%)
Gross profit	90,000 (24%)	108,000 (30%)

Installment rec. from 2018 sales (9,000/ 24%)	37,500
Installment rec. from 2019 sales (72,000/ 30%)	240,000
Total installment rec., 12/31/2019	277,500

In applying the installment method in the accounts, the difference between the sales price and the cost of sales is recorded initially as deferred gross profit. This balance is recognized as revenue periodically in the proportion that the cash collections of the period bear to the sales price. Stated differently, the original gross profit percentage on the sale is applied to periodic collections in arriving at the amount to be recognized as revenue. At the end of each period, a deferred gross profit balance remains on the books and is equal to the gross profit percentage applied to the balance of installment receivable as of this date.

PROB. 16-21 *Suggested answer* (d) P1,500,000

Installment accounts receivable:	
2019 sales (120,000/ 30%)	400,000
2020 sales (440,000/ 40%)	1,100,000
Installment accounts receivable, 12/31/2020	1,500,000

Again, at the end of each period, a deferred gross profit balance is equal to the gross profit percentage applied to the balance of installment receivable as of this date. It should be pointed out that gross profit percentage on sales may differ from period to period. In addition, the installment accounts receivable balance, a permanent account, as of a given period relates to uncollected balances of installment sales from different periods of sales.

PROB. 16-22 *Suggested answer* (c) P1,700,000

	2019	2020
Sales	1,000,000	2,000,000
Less collections from:		
2019 sales [(150,000 + 90,000)/ 30%]	800,000	
2020 sales (200,000/ 40%)		500,000
Total installment accounts Receivable, 12/31/2020	200,000	1,500,000

Again, in cognizant with the revenue realization principle (point of collections), the gross profit realized in installment sales is normally

computed by applying the gross profit percentage on sales with the amount of collections during a period. Thus, to determine the amount collected from specific installment sales, the realized gross profit at a given period should be divided by the respective gross profit percentage on sales. And as a permanent account, installment accounts receivable, as of a given date relates to uncollected balances of installment sales from different periods of sales. Therefore, the total installment accounts receivable at December 31, 2020 should be P1,700,000 (200,000 + 1,500,000).

PROB. 16-23 *Suggested answer* (d) P840,000

Unrealized gross profit	192,000
Divide by gross profit rate on sales (66 2/3%/ 166 2/3%)	40%
Uncollected portion of installment sales	480,000
Add collections including down payment	360,000
Total amount of installment sales	840,000

In installment sales, the total amount of sales on installment basis is composed of uncollected portion (installment accounts receivable account) and the amount collected, and for purposes of computing the realized gross profit and unrealized gross profit, the related gross profit percentage to be applied should be based on sales.

PROB. 16-24

a. *Suggested answer* (a) P5,040,000

Installment sales, 2019	14,000 000
Less cash collections	1,400,000
Installment accounts receivable, 12/31/2019	12,600,000
Multiply by gross profit percentage	40%
Deferred gross profit	5,040,000

As mentioned earlier, the deferred gross profit at the end of the given period is equal to the installment accounts receivable in the same period applied to gross profit rate on sales. Without any qualification, gross profit percentage is based on sales.

b. *Suggested answer* (d) P808,000

Cash collections in 2020	2,020,000
Multiply by gross profit rate on sales	40%
Realized gross profit, 2020	808,000

Normally, realized gross profit is equal to cash collections at a given period applied to gross profit rate on sales.

PROB. 16-25 *Suggested answer* (b) P3,312

	Collections	Interest	Principal	Balance
S/price				24,000.00
Down/P	2,400.00		2,400.00	21,600.00
Oct.	1,800.00	216.00	1,584.00	20,016.00
Nov.	1,800.00	200.16	1,599.84	18,416.16
Dec.	1,800.00	184.16	1,615.84	16,800.32
Jan.	1,800.00	168.00	1,632.00	15,168.32
Total	9,600.00	768.32	8,831.68	

Collections applying to principal	8,831.68
Multiply by gross profit rate on sales [(24,000 - 15,000)/ 24,000]	37.5%
Realized gross profit	3,312

Again, the realized gross profit in this case is equal to the collections applying to principal applied to the gross profit rate on sales. The down payment of P2,400 was assumed to have been included in P9,600 total payment at the date of repossession, because if this amount (down payment) will be assumed not to have been included in the total amount paid, the realized gross profit would be P4,225.47 (11,267.92 x 37.5%) which is none of the choices given.

PROB. 16-26

a. *Suggested answer* (c) P94,500

	2018	2019	2020
Installment receivable, 12/31/19	135,000	300,000	495,000
Installment receivable, 12/31/20	60,000	195,000	390,000
Total credits	75,000	105,000	105,000
Less unpaid balance	22,500		
Collections	52,500	105,000	105,000
Gross profit percentage	30%	40%	35%
Realized gross profit	15,750	42,000	36,750

The installment method of accounting is revenue recognition based at the point of collections. In other words, a proportional amount of installment gross profit is realized as the installment receivable is collected. This amount is equal to the gross profit margin associated with the receivable multiplied by the amount of the receivable collected. Thus, the total gross profit collected in 2020, regardless of the year of sale, in the amount of P94,500 (15,750 + 42,000 + 36,750) was reported as realized.

b. *Suggested answer* (b) (750)

Fair value of repossessed merchandise	15,000
Less unrecovered cost (22,500 x 70%)	15,750
Loss on repossession	(750)

If the customer defaults on an installment contract and no further collections can be made, the seller may repossess the merchandise sold to satisfy the remaining indebtedness.

If the repossessed merchandise is recorded at a value less than the unrecovered cost (the difference between the balance in installment contracts receivable account and the deferred gross profit account), a loss on repossession will be reported. Conversely, if the value assigned to the repossessed merchandise is more than the unrecovered cost, there is a gain. Any gain or loss on defaults and repossession is normally recognized on the income statement as an addition to or subtraction from the realized gross profit on installment sales.

PROB. 16-27

a. *Suggested answer* (a) P300

Trade-in value (Article "B")			1,200
Less actual value:			
Resale price		1,100	
Less: reconditioning cost	80		
normal gross profit (20% x 1,100)	220	300	800
Overallowance			400
Sales price (Article "A")		4,000	
Less overallowance		400	
Adjusted sales price		3,600	(100%)
Less cost of goods sold		2,700	(75%)
Gross profit		900	(25%)
Down payment (actual value of Art. "B") [1,100 - (80 - 220)]			800
Installment payments (Nov. & Dec.) (200 x 2)			400
Total collections, 2019			1,200
Multiply by gross profit rate			25%
Realized gross profit, 2019			300

The trade-in is recorded at the value allowed. The difference between the trade-in value and actual value (the value of the old merchandise traded-in after the provisions of expected reconditioning cost and a normal gross profit upon its resale) of the article traded-in may result to under or overallowance. Underallowance is an addition to sales price of the merchandise accepted as trade-in; while overallowance is either a charge to overallowance account or a reduction from installment sales account. When the periodic inventory system is used, trade-ins are recorded in a separate nominal account, Trade-In Merchandise, and this balance is added to purchases in determining cost of goods sold at the end of the period.

b. *Suggested answer* (d) P350

Adjusted sales price (a)		3,600
Less collections until the date of default:		
Down payment (value of Art. B)	800	
Installment payments (Nov.-Mar.) (200 x 5)	1,000	1,800
Unpaid balance, 4/1/2020		1,800

Value of repossessed merchandise [80 + (1,350 x 20%)] - 1,350		1,000
Less unrecovered cost:		
Unpaid balance	1,800	
Less normal profit (1,800 x 25%)	450	1,350
Loss on repossession		(350)

If the customer defaults on an installment contract and no further collections can be made, the seller may repossess the merchandise sold to satisfy the remaining indebtedness. The normal problem in the determination of value to be assigned to the repossessed merchandise is the determination of its fair value at the time of repossession. To do so, the objective is to choose an amount that will allow for any reconditioning costs and a normal gross profit on its resale. The resale should be recorded in a usual manner similar with regular or installment sale transactions. Any gain or loss on defaults and repossession is normally recognized on the income statement as an addition to or subtraction from the realized gross profit on installment sales.

PROB. 16-28 *Suggested answer (b) 1,100 loss*

Value of repossessed merchandise		4,500
Less unrecovered cost:		
Unpaid balance	8,000	
Less normal profit (8,000 x 30%)	2,400	5,600
Loss on repossession		(1,100)

PROB. 16-29 *Suggested answer (d) 125 gain*

Value of repossessed merchandise (1,300 – 125)		1,175
Less unrecovered cost:		
Unpaid balance	3,500	
Less normal profit (3,500 x 70%)	2,450	1,050
Loss on repossession		(125)

Chapter 17

ACCOUNTING FOR INSURANCE CONTRACTS

INTRODUCTION

IFRS/PFRS 17, *Insurance Contracts* establishes the principles for the recognition, measurement, presentation and disclosure of Insurance contracts within the scope of the Standard. The objective of this standard is to ensure that an entity provides relevant information that faithfully represents those contracts. This information gives a basis for users of financial statements to assess the effect that insurance contracts have on the entity's financial position, financial performance and cash flows.

Scope of PFRS 17

An entity shall apply IFRS 17 *Insurance Contracts* to:

- Insurance contracts, including reinsurance contracts, it issues;
- Reinsurance contracts it holds; and
- Investment contracts with discretionary participation features it issues, provided the entity also issues insurance contracts.

Some contracts meet the definition of an insurance contract but have as their primary purpose the provision of services for a fixed fee. Such issued contracts are in the scope of the standard, unless an entity chooses to apply to them IFRS 15, *Revenue from Contracts with Customers* and provided the following conditions are met: [IFRS 17:8]

- (a) the entity does not reflect an assessment of the risk associated with an individual customer in setting the price of the contract with that customer;
- (b) the contract compensates the customer by providing a service, rather than by making cash payments to the customer; and
- (c) the insurance risk transferred by the contract arises primarily from the customer's use of services rather than from uncertainty over the cost of those services.

Definition of Terms

- **Insurance contract** is a contract under which one party (the issuer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder.

- **Portfolio of insurance contract** *are* insurance contracts subject to similar risks and managed together.

- **Contractual service margin** is a component of the carrying amount of the asset or liability for a group of insurance contracts representing the unearned profit the entity will recognize as it provides services under the insurance contracts in the group.

- **Insurance risk** refers to risk, other than financial risk, transferred from the holders of a contract to the issuer.

- **Fulfillment cash flows** is an explicit, unbiased and probability-weighted estimate (i.e. expected value) of the present value of the future cash outflows less the present value of the future cash inflows that will arise as the entity fulfils insurance contracts, including a risk adjustment for non-financial risk.

- **Risk adjustment for non-financial risk** is the compensation an entity requires for bearing the uncertainty about the amount and timing of the cash flows arising from non-financial risk as the entity fulfils insurance contracts.

Examples of Insurance Contracts

The following are examples of insurance contracts, if the transfer of insurance risk is significant:

1. Insurance against theft or damage to property.
2. Insurance against product liability, professional liability, civil liability or legal expenses.
3. Life insurance and prepaid funeral plans.
4. Life-contingent annuities and pensions
5. Disability and medical cover.
6. Surety bonds, fidelity bonds, performance bonds, and bid bonds.

7. Credit insurance that provides for specified payments to be made to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due under the original or modified terms of a debt instrument. Note, that although these contracts meet the definition of an insurance contract, they also meet the definition of a financial guarantee contract in IFRS 9 and are within the scope of IAS 32 and IFRS 9, not this IFRS. Nevertheless, if an issuer of financial guarantee contracts has previously asserted explicitly that it regards such contracts as insurance contracts and has used accounting applicable to insurance contracts, the issuer may elect to apply either IAS 32 and IFRS 9, or this IFRS to such financial guarantee contracts.
8. Product warranties issued by another party for goods sold by a manufacturer, dealer or retailer; except those issued directly by a manufacturer, dealer or retailer which are within the scope of IAS 18, *Revenue* and IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*.
9. Title insurance.
10. Travel assistance.
11. Catastrophe bonds that provide for reduced payments of principal, interest or both if a specified event adversely affects the issuer of the bond.
12. Insurance swaps and other contracts that require payment based on changes in climatic, geological or other physical variables that are specific to a party to the contract.
13. Reinsurance contracts

Separating Components from an Insurance Contract

An insurance contract may contain one or more components that would be within the scope of another standard if they were separate contracts. For example, an insurance contract may include an investment component or a service component (or both). The standard provides the criteria to determine when a non-insurance component is distinct from the host insurance contract.

An entity shall

- Apply PFRS 9 *Financial Instruments* to determine whether there is an embedded derivative to be separated and, if there is, how to account for such a derivative.

- Separate from a host insurance contract an investment component if, and only if, that investment component is distinct. The entity shall apply PFRS 9 to account for the separated investment component.

- After performing the above steps, separate any promises to transfer distinct non-insurance goods or services. Such promises are accounted under PFRS 15 *Revenue from Contracts with Customers*.

Level of Aggregation

IFRS/PFRS 17 requires entities to identify *portfolios of insurance contracts*, which comprises contracts that are subject to similar risks and managed together. Contracts within a product line would be expected to have similar risks and hence would be expected to be in the same portfolio if they are managed together.

Each portfolio of insurance contracts issues shall be divided into a minimum of:

- A group of contracts that are onerous at initial recognition, if any;
- A group of contracts that at initial recognition have no significant possibility of becoming onerous subsequently, if any; and
- A group of the remaining contracts in the portfolio, if any.

An entity is not permitted to include contracts issued more than one year apart in the same group. If contracts within a portfolio would fall into different groups only because law or regulation specifically constrains the entity's practical ability to set a different price or level of benefits for policyholders with different characteristics, the entity may include those contracts in the same group.

Recognition

An entity shall recognize a group of insurance contracts it issues from the earliest of the following

a. the beginning of the coverage period of the group of contracts;
b. the date when the first payment from a policyholder in the group becomes due; and
c. for a group of onerous contracts, when the group becomes onerous.

Measurement

On initial recognition, an entity shall measure a group of insurance contracts at the total of:

1. the Fulfilment Cash Flows ("FCF"), which comprise:

a. estimates of future cash flows;
b. an adjustment to reflect the time value of money ("TVM") and the financial risks associated with the future cash flows; and
c. a risk adjustment for non-financial risk

2. the contractual service margin ("CSM").

An entity shall include all the future cash flows within the boundary of each contract in the group. The entity may estimate the future cash flows at a higher level of aggregation and then allocate the resulting fulfilment cash flows to individual groups of contracts.

The estimates of future cash flows shall be current, explicit, unbiased, and reflect all the information available to the entity without undue cost and effort about the amount, timing and uncertainty of those future cash flows.

They should reflect the perspective of the entity, provided that the estimates of any relevant market variables are consistent with observable market prices.

Discount rates

The discount rates applied to the estimate of cash flows shall:

- reflect the time value of money (TVM), the characteristics of the cash flows and the liquidity characteristics of the insurance contracts;
- be consistent with observable current market prices (if any) of those financial instruments whose cash flow characteristics are consistent with those of the insurance contracts; and
- exclude the effect of factors that influence such observable market prices but do not affect the future cash flows of the insurance contracts.

Risk Adjustment for Non-Financial Risk

The estimate of the present value of the future cash flows is adjusted to reflect the compensation that the entity requires for bearing the uncertainty about the amount and timing of future cash flows that arises from non-financial risk.

Contractual Service Margin (CSM)

The CSM represents the unearned profit of the group of insurance contracts that the entity will recognize as it provides services in the future. This is measured on initial recognition of a group of insurance contracts at an amount that, unless the group of contracts is onerous, results in no income or expenses arising from:

- the initial recognition of an amount for the FCF;
- the derecognition at that date of any asset or liability recognized for insurance acquisition cash flows; and
- any cash flows arising from the contracts in the group at that date.

Subsequent Measurement

On subsequent measurement, the carrying amount of a group of insurance contracts at the end of each reporting period shall be the sum of: [IFRS 17:40]

1. the liability for remaining coverage comprising:
    a. the FCF related to future services and;
    b. the CSM of the group at that date;
2. the liability for incurred claims, comprising the FCF related to past service allocated to the group at that date.

Onerous Contracts

An insurance contract is onerous at initial recognition if the total of the FCF, any previously recognized acquisition cash flows and any cash flows arising from the contract at that date is a net outflow. An entity shall recognize a loss in profit or loss for the net outflow, resulting in the carrying amount of the liability for the group being equal to the FCF and the CSM of the group being zero.

On subsequent measurement, if a group of insurance contracts becomes onerous (or more onerous), that excess shall be recognized in profit or loss. Additionally, the CSM cannot increase and no revenue can be recognized, until the onerous amount previously recognized has been reversed in profit or loss as part of a service expense.

Premium Allocation Approach (PAA)

An entity may simplify the measurement of the liability for remaining coverage of a group of insurance contracts using the Premium Allocation Approach (PAA) on the condition that, at the inception of the group:

- the entity reasonably expects that this will be a reasonable approximation of the general model, or
- the coverage period of each contract in the group is one year or less.

Where, at the inception of the group, an entity expects significant variances in the FCF during the period before a claim is incurred, such contracts are not eligible to apply the PAA

Using the PAA, the liability for remaining coverage shall be initially recognized as the premiums, if any, received at initial recognition, minus any insurance acquisition cash flows. Subsequently the carrying amount of the liability is the carrying amount at the start of the reporting period plus the premiums received in the period, minus insurance acquisition cash flows, plus amortization of acquisition cash flows, minus the amount recognized as insurance revenue for coverage provided in that period, and minus any investment component paid or transferred to the liability for incurred claims.

Practical Expedients Available under the PAA

If insurance contracts in the group have a significant financing component, the liability for remaining coverage needs to be discounted, however, this is not required if, at initial recognition, the entity expects that the time between providing each part of the coverage and the due date of the related premium is no more than a year.

In applying PAA, an entity may choose to recognize any insurance acquisition cash flows as an expense when it incurs those costs, provided that the coverage period at initial recognition is no more than a year.

The simplifications arising from the PAA do not apply to the measurement of the group's liability for incurred claims, measured under the general model. However, there is no need to discount those cash flows if the balance is expected to be paid or received in one year or less from the date the claims are incurred.

Investment Contracts with a DPF

An investment contract with a DPF is a financial instrument and it does not include a transfer of significant insurance risk. It is in the scope of the standard only if the issuer also issues insurance contracts. The requirements of the Standard are modified for such investment contracts.

Reinsurance contracts held

The requirements of the standard are modified for reinsurance contracts held.

In estimating the present value of future expected cash flows for reinsurance contracts, entities use assumptions consistent with those used for related direct insurance contracts. Additionally, estimates include the risk of reinsurer's non-performance.

The risk adjustment for non-financial risk is estimated to represent the transfer of risk from the holder of the reinsurance contract to the reinsurer.

On initial recognition, the CSM is determined similarly to that of direct insurance contracts issued, except that the CSM represents net gain or loss on purchasing reinsurance. On initial recognition, this net gain or loss is deferred, unless the net loss relates to events that occurred before purchasing a reinsurance contract (in which case it is expensed immediately).

Subsequently, reinsurance contracts held are accounted similarly to insurance contracts under the general model. Changes in reinsurer's risk of non-performance are reflected in profit or loss, and do not adjust the CSM.

Modification of an insurance contract

If the terms of an insurance contract are modified, an entity shall derecognize the original contract and recognize the modified contract as a new contract if there is a substantive modification, based on meeting any of the specified criteria.

The modification is substantive if any of the following conditions are satisfied:

(a) if, had the modified terms been included at contract's inception, this would have led to:
   - exclusion from the Standard's scope;

- unbundling of different embedded derivatives;
- redefinition of the contract boundary; or
- the reallocation to a different group of contracts; or

(b) if the original contract met the definition of a direct par insurance contracts, but the modified contract no longer meets that definition, or vice versa; or

(c) the entity originally applied the PAA, but the contract's modifications made it no longer eligible for it.

Derecognition of an Insurance Contract

An entity shall derecognize an insurance contract when it is extinguished, or if any of the conditions of a substantive modification of an insurance contract are met.

DISCRETIONARY PARTICIPATION FEATURES

The IFRS addresses limited aspects of discretionary participation features contained in insurance contracts or financial instruments.

Insurance Contracts

Some insurance contracts contain a discretionary participation feature as well as a guaranteed element.

1. The issuer of such contract may, but need not, recognize the guaranteed element separately from the discretionary participation feature. If the issuer *does not recognize them separately*, it shall classify the whole contract as a liability. If the issuer classifies them separately, it shall classify the guaranteed element as a liability.

2. If it *recognizes the discretionary participation feature separately* from the guaranteed element, the issuer of such contract shall classify that feature as either a liability or a separate component of equity. This IFRS does not specify how the issuer determines whether that feature is a liability or equity. The issuer may split that feature into liability and equity components and shall use a consistent accounting policy for that split. The issuer shall not

classify that feature as an intermediate category that is neither liability or equity.

3. The issuer of such contract may recognize all premiums received as revenue without separating any portion that relates to the equity component. The resulting changes in the guaranteed element and in the portion of the discretionary participation feature classified as a liability shall be recognized in profit or loss. If part or all of the discretionary participation feature is classified in equity, a portion of profit or loss may be attributable to that feature (in the same way that a portion may be attributable to non-controlling interests). The issuer shall recognize the portion of profit or loss attributable to any equity component of a discretionary participation feature as an allocation of profit or loss, not as expense or income.

4. If the contract contains an embedded derivative within the scope of IFRS 9, *Financial Instruments*, the issuer shall apply IFRS 9 to that embedded derivative.

LIABILITY ADEQUACY TEST

Many existing accounting models have tests to confirm that insurance liabilities are not understated, and the related amounts recognized as asset, such as deferred acquisition costs, are not overstated. The precise form of the test depends on the underlying measurement approach. However, there is no guarantee that these tests exist everywhere and the credibility of IFRS could suffer if an issuer claims to comply with IFRS but fails to recognize material and reasonably foreseeable losses arising from existing contractual obligations. To avoid this, the IFRS requires a liability adequacy test.

If an insurer applies a liability adequacy test that meets specified minimum requirements, this IFRS imposes no further requirements. The minimum requirements are the following:

1. The test considers current estimates of all contractual cash flows, and of related cash flows such as claims handling costs, as well as cash flows resulting from embedded options and guarantees.

2. If the test shows that the liability is inadequate, the entire deficiency is recognized in profit or loss.

However, if an insurer's accounting policies do not require a liability adequacy test that meets the minimum requirements, the insurer shall:

1. Determine the carrying amount of the relevant insurance liabilities less the carrying amount of any related deferred acquisition cost and any related intangible assets.

2. Determine whether the amount described in (1.) is less than the carrying amount that would be required if the relevant insurance liabilities were within the scope of IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*. If it is less, the insurer shall recognize the entire difference in profit or loss and decrease the carrying amount of the related deferred acquisition costs or related intangible assets or increase the carrying amount of the relevant insurance liabilities.

If an insurer's liability adequacy test meets the minimum requirements, the test is applied at the level of aggregation specified in the test. Otherwise, it shall be made at the level of a portfolio of contracts that are subject to broadly similar risks and managed together as a single portfolio.

Presentation in the statement of financial position

An entity shall present separately in the statement of financial position the carrying amount of groups of:

- insurance contracts issued that are assets;
- insurance contracts issued that are liabilities;
- reinsurance contracts held that are assets; and
- reinsurance contracts held that are liabilities.

Recognition and presentation in the statement(s) of financial performance

An entity shall disaggregate the amounts recognized in the statement(s) of financial performance into:

- an insurance service result, comprising insurance revenue and insurance service expenses; and
- insurance finance income or expenses.

Income or expenses from reinsurance contracts held shall be presented separately from the expenses or income from insurance contracts issued.

Insurance Service Result

An entity shall present in profit or loss revenue arising from the groups of insurance contracts issued, and insurance service expenses arising from a group of insurance contracts it issues, comprising incurred claims and other incurred insurance service expenses. Revenue and insurance service expenses shall exclude any investment components. An entity shall not present premiums in the profit or loss, if that information is inconsistent with revenue presented.

Insurance Finance Income or Expenses

Insurance finance income or expenses comprises the change in the carrying amount of the group of insurance contracts arising from

a. the effect of the time value of money and changes in the time value of money; and
b. the effect of changes in assumptions that relate to financial risk; but excluding any such changes for groups of insurance contracts with direct participating insurance contracts that would instead adjust the CSM.

An entity has an accounting policy choice between including all of insurance finance income or expense for the period in profit or loss, or disaggregating it between an amount presented in profit or loss and an amount presented in other comprehensive income ("OCI").

Under the general model, disaggregating means presenting in profit or loss an amount determined by a systematic allocation of the expected total insurance finance income or expenses over the duration of the group of contracts. On derecognition of the groups amounts remaining in OCI are reclassified to profit or loss.

Under the VFA, for direct par insurance contracts, only where the entity holds the underlying items, disaggregating means presenting in profit or loss as insurance finance income or expenses an amount that eliminates the accounting mismatches with the finance income or expenses arising on the underlying items. On derecognition of the groups, the amounts previously recognized in OCI remain there.

MULTIPLE CHOICE – Theory of Accounts

TOA 17-1 (AICPA)

IFRS 4, *Insurance Contracts* was introduced principally for what reason?

a. To make limited improvements to the accounting for insurance contracts.
b. To completely overhaul insurance accounting.
c. As a response to recent scandals within the insurance industry.
d. Because of pressure from the financial services authorities in several countries.

TOA 17-2 (AICPA)

Which of the following types of insurance contracts would probably not be covered by IFRS 4, *Insurance Contracts*?

a. Motor insurance
b. Life insurance
c. Medical insurance
d. Pension plan

TOA 17-3 (AICPA)

Which of the following accounting practices is prohibited by IFRS 4, *Insurance Contracts*?

a. Shadow accounting.
b. Catastrophe provisions.
c. A test for the adequacy of recognized insurance liabilities.
d. An impairment test for reinsurance assets.

TOA 17-4 (IFRS)

IFRS 4, *Insurance Contracts,* defines Cedant as:

a. The party that has an obligation under reinsurance contract to compensate the policyholder, if the insured event occurs.

b. The party that has an obligation under an insurance contract to compensate the policyholder, if the insured event occurs.
c. The party that has a right to compensate under an insurance contract, if the insured event occurs.
d. The party that has a right to compensate under reinsurance contract, if the insured event occurs.

TOA 17-5 (IFRS)

It is an insurance contract issued by one insurer to compensate another insurer for losses on one or more contracts issued by the cedant

a. Insurance contract
b. Re-insurance contract
c. Direct insurance contract
d. Financial guarantee contract

TOA 17-6 (IFRS)

IFRS 4, *Insurance Contracts, shall be applied by an entity to:*

a. Financial instruments that it issues with a discretionary participation feature.
b. Product warranties issued directly by a manufacturer.
c. Direct insurance contracts where the entity is the policyholder.
d. Contingent consideration payable or receivable in a business combination.

TOA 17-7 (IFRS)

Under IFRS 4, *Insurance Contracts,* an insurer is not allowed to introduce the following accounting practices, except:

a. Measuring insurance liabilities on an undiscounted basis.
b. Using non-uniform accounting policies for the insurance liabilities of subsidiaries.
c. Measuring contractual rights to future investment management fees at an amount that exceeds their fair value as implied by a comparison with current fees charged by other market participants for similar services.
d. Re-measuring designated insurance liabilities consistently in each period to reflect current market interest rates.

TOA 17-8 (IFRS)

IFRS 4, *Insurance Contracts,* exempts an insurer temporarily from some requirements of other IFRSs in selecting accounting policies for insurance contracts for

a. Liability adequacy test.
b. Considering the impairment of its reinsurance assets.
c. Reinsurance contracts that it holds.
d. Reviewing an insurance liability from its Statement of Financial Position when it is extinguished.

TOA 17-9 (IFRS)

Discretionary participation feature is a contractual right to receive additional benefits that are contractually based on the following, except:

a. Separate and not related to guaranteed benefits.
b. The profit or loss of the company, fund and other entity that issues the contract.
c. The performance of a specified pool of contracts or a specified type of contract.
d. Realized and/or unrealized investment returns on a specified pool of assets held by the issuer.

TOA 17-10 (IFRS)

IFRS 4, *Insurance Contracts,* provides discretionary participation features in insurance contracts recognized separately from the guaranteed elements, where the issuer of such contract:

a. Shall classify that feature as either a liability or a separate component of equity.
b. Shall classify that feature as an intermediate category that is neither liability nor equity.
c. Shall classify the entire discretionary participation feature as a liability.
d. Shall classify the entire discretionary participation feature as a separate component of equity.

TOA 17-11 (IFRS)

According to IFRS 4, *Insurance Contracts,* an insurer shall disclose the following information that identifies and explains the amounts in its financial statements arising from insurance contracts, except:

a. Its accounting policies for insurance contracts and related assets, liabilities, income and expenses.
b. The effect of changes in assumptions used to measure insurance assets and insurance liabilities, showing separately the effect of each change that has a material effect on the financial statements.
c. The reconciliation of changes in insurance liabilities, reinsurance assets, and, if any, related deferred acquisition costs.
d. The comparative information that relates to annual periods beginning January 1, 2005.

TOA 17-12 (Author)

PFRS 17: Insurance contracts shall apply to the following, except

a. Insurance contracts, including reinsurance contracts it issues
b. Reinsurance contracts it holds
c. Investment contracts with discretionary participation features it issues provided the entity also issues insurance contracts.
d. Pre-need contracts

TOA 17-13 (Author)

It refers to a contract under which one party (the issuer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder.

a. Pre-need contract
b. Insurance contract
c. Lease contract
d. Subscription contract

TOA 17-14 (Author)

It refers to a component of the carrying amount of the asset or liability for a group of insurance contracts representing the unearned profit the entity will recognize as it provides services under the insurance contracts in the group. It represents the unearned profit of the group of insurance contracts that the entity will recognize as it provides services in the future.

a. Contractual service margin
b. Gross profit
c. Gross margin
d. Net profit

TOA 17-15 (Author)

It refers to a risk, other than financial risk, transferred from the holders of a contract to the issuer.

a. Credit risk
b. Interest rate risk
c. Insurance risk
d. Price risk

TOA 17-16 (Author)

It refers to an explicit, unbiased and probability-weighted estimate (i.e. expected value) of the present value of the future cash outflows less the present value of the future cash inflows that will arise as the entity fulfils insurance contracts, including a risk adjustment for non-financial risk.

a. Fulfillment cash flows
b. Performance cash flows
c. Payment cash flows
d. Satisfaction cash flows

TOA 17-17 (Author)

It refers to the compensation an entity requires for bearing the uncertainty about the amount and timing of the cash flows arising from non-financial risk as the entity fulfils insurance contracts.

a. Risk adjustment for financial risk

b. Risk adjustment for non-financial risk
c. Risk adjustment for credit risk
d. Risk adjustment for price risk

TOA 17-18 (Author)

Which of the following statements is incorrect about the level of aggregation in insurance contracts?

a. PFRS 17 requires entities to identify portfolio of insurance contracts, which comprises contracts that are subject to similar risk and managed together
b. Contracts within a product line would be expected to have similar risks and hence would be expected tone in the same portfolio if they are managed together.
c. An entity is permitted to include contracts issued more than one year apart in the same group.
d. If contracts within a portfolio would fall into different groups only because law or regulation specifically constraints the entity's practical ability to set a different price or level of benefits for policyholders with different characteristics, the entity may include those contracts in the same group.

TOA 17-19 (Author)

An entity shall recognize a group of insurance contracts it issues from the earliest of the following, except

a. The beginning of the coverage period of the group of contracts.
b. The date when the first payment from a policyholder in the group becomes due.
c. For a group of onerous contracts when the group becomes onerous.
d. The date of meeting of minds of contracting parties.

TOA 17-20 (Author)

On initial recognition, an entity shall measure a group of insurance contracts at the

a. The fulfillment cash flows (FCF)
b. The contractual service margin (CSM)
c. Total of "a" and "b"
d. Either "a' or "b"

TOA 17-21 (Author)

The following are the components of fulfillment cash flows (FCF), except
a. estimates of future cash flows
b. an adjustment to reflect the time value of money ("TVM") and the financial risks associated with the future cash flows
c. A risk adjustment for non-financial risk
d. Foreign currency risk gain or loss

TOA 17-22 (Author)

The estimates of future cash flows of insurance contract shall be, except
a. Current
b. Explicit
c. Biased
d. reflective of all the information available to the entity without undue cost and effort about the amount, timing and uncertainty of those future cash flows

TOA 17-23 (Author)

Where shall an entity shall present revenue arising from the groups of insurance contracts issued, and insurance service expenses arising from a group of insurance contracts it issues, comprising incurred claims and other incurred insurance service expenses?
a. Profit or loss
b. Other comprehensive income with reclassification adjustment to profit or loss
c. Other comprehensive income without reclassification adjustment to profit or loss
d. Retained earnings

TOA 17-24 (Author)

Where shall an entity present all insurance finance income or expense?
a. Profit or loss
b. Other comprehensive income
c. Either "a" or "b"
d. Neither "a" nor "b"

TOA 17-25 (Author)

When shall an entity derecognize an insurance contract?

a. When the insurance contract is extinguished.
b. When any of the conditions of a substantive modification of an insurance contract are met.
c. Either "a" or "b"
d. Neither "a" nor "b"

ANSWERS – Theory of Accounts

TOA 17-1 *Suggested answer (a) To make limited improvements to the accounting for insurance contracts.*

IFRS 4 was introduced in time for insurance companies to comply with the adoption of IFRS in 2005. The standard is designed to make limited improvements to accounting practices and to provide users with an insight into the key areas that relate to accounting for insurance contracts.

TOA 17-2 *Suggested answer (d) Pension plan*

IFRS 4, Insurance Contracts, covers most motor, travel, life, and property insurance contracts as well as most reinsurance contracts. However, some policies that transfer no significant risk, such as savings and pension plan, are covered by IAS 39 and accounted for as financial instruments irrespective of their legal form.

TOA 17-3 *Suggested answer (b) Catastrophe provisions*

IFRS 4, Insurance Contracts, prohibits provisions for possible claims under contracts that are not in existence at the end of the reporting period date. This includes catastrophe provisions and equalization provisions.

TOA 17-4 *Suggested answer (d)*

This is the definition of cedant as provided in Appendix A of IFRS 4.

TOA 17-5 *Suggested answer (b)*

This is the definition of re-insurance contract as provided in Appendix A of IFRS 4.

TOA 17-6 *Suggested answer (a)*

According to IFRS 4, Insurance Contracts, paragraph 2, an entity shall apply this IFRS to:

1. *Insurance contracts (including reinsurance contracts) that it issues and reinsurance contracts that it holds.*
2. ***Financial instruments that it issues with a discretionary participation feature.***

TOA 17-7 *Suggested answer (d)*

IFRS 4 permits the introduction of an accounting policy that ***involves re-measuring designated insurance liabilities consistently in each period to reflect current market interest rates*** *(and if the insurer so elects, other current estimates and assumptions).*

TOA 17-8 *Suggested answer (c)*

IAS 8, Accounting Policies, Changes in Accounting Estimates and Errors, paragraph 10-12, specify criteria for an entity to use in developing an accounting policy if no IFRS applies specifically to an item. However, IFRS 4, paragraph 13 ***exempts an insurer from applying those criteria to its accounting policies for:***

1. *Insurance contracts that it issues (including related acquisition costs and related intangible assets); and*
2. ***Reinsurance contracts it holds.***

TOA 17-9 *Suggested answer (a) Separate and not related to guaranteed benefits.*

IFRS 4, Appendix A, defined discretionary participation feature as a contractual right to receive, as supplement to guaranteed benefits, additional benefits:

a) *That are likely to be significant portion of the total contractual benefits;*
b) *Whose amount or timing is contractually at the discretion of the issues; and*
c) *That are contractually based on:*
   - *The performance of a specified pool of contracts or a specified type of contract;*

- *Realized and/or unrealized investment returns on a specified pool of assets held by the issuer; or*
- *The profit or loss of the company, fund or other entity that issues the contract.*

TOA 17-10 *Suggested answer (a)*

IFRS 4, paragraph 34.b, states that if it (issuer) recognizes the discretionary participation feature separately from the guaranteed element, ***it shall classify that feature as either a liability or a separate component of equity****. This IFRS does not specify how the issuer determines whether that feature is a liability or equity. The issuer may split that feature into liability and equity components and shall use a consistent accounting policy for that split. The issuer shall not classify that feature as an intermediate category that is neither liability nor equity.*

TOA 17-11 *Suggested answer (d)*

According to IFRS 4, paragraph 42, an entity need not apply the disclosure requirements in this IFRS ***to comparative information that relates to annual periods beginning January 1, 2005****, except for the disclosure required by paragraph 37 (a) and (b) about accounting policies, and recognized assets, liabilities, income and expenses (and cash flows if the direct method is used).*

TOA 17-12 *Suggested answer: (d) Pre-need contracts*

TOA 17-13 *Suggested answer: (b) Insurance contract*

TOA 17-14 *Suggested answer: (a) Contractual service margin*

TOA 17-15 *Suggested answer: (c) Insurance risk*

TOA 17-16 *Suggested answer: (a) Fulfillment cash flows*

TOA 17-17 *Suggested answer: (b) Risk adjustment for non-financial risk*

TOA 17-18 *Suggested answer: (c) An entity is permitted to include contracts issued more than one year part in the same group*

TOA 17-19 *Suggested answer: (d) The date of meeting of minds of contracting parties*

TOA 17-20 *Suggested answer: (c) Total of "a" and "b"*

TOA 17-21 *Suggested answer: (d) Foreign currency risk gain or loss*

TOA 17-22 *Suggested answer: (c) biased*

TOA 17-23 *Suggested answer: (a) Profit or loss*

TOA 17-24 *Suggested answer: © Either "a" or "b"*

TOA 17-25 *Suggested answer: (c) Either "a" or "b"*

Chapter 18

ACCOUNTING FOR BUILD, OPERATE AND TRANSFER

Introduction

Generally, infrastructure for public services, such as roads, bridges, etc., has traditionally been constructed, operated and maintained by the public sector and financed through public budget appropriation. However, the government has introduced contractual service arrangement to attract private sector participation in the development, financing, operation and maintenance of such infrastructure.

The scope of IFRIC Interpretation 12, *Service Concession Arrangement,* typically involves a private sector entity (an operator) constructing the infrastructure used to provide the public service or upgrading it, operating and maintaining that infrastructure for a specified period of time. The operator is paid for its services over the period of the arrangement. Such arrangement is often called as a "*build-operate-transfer*", *a "rehabilitate-operate-transfer", or a "public-to-private"* service concession arrangement.

This Interpretation applies to public-to-private service concession arrangement if:

1. The grantor controls or regulates what services the operator must provide with the infrastructure, to whom it must provide them, and at what price; and

2. The grantor controls - through ownership, beneficial entitlement or otherwise – any significant residual interest in the infrastructure at the end of the term of arrangement.

This Interpretation applies to both:

1. Infrastructure that the operator construct or acquires from a third party for the purpose of the service arrangement; and

2. Existing infrastructure to which the grantor gives the operator access for the purpose of the service arrangement.

Recognition and Measurement

IFRIC 12, *Service Concession Arrangement,* sets out infrastructure assets are not items of property, plant and equipment of the concession operator because the contractual service arrangements does not convey the right to control the use of the public service infrastructure to the operator. The operator has access to operate the infrastructure to provide the public service on behalf of the grantor in accordance with the terms specified in the contract.

The grantor may also provide other items to the operator that the operator can keep or deal with as it wishes. If such assets form part of the consideration payable by the grantor for the services, they are not government grants as defined in IAS 20, *Accounting for Government Grants and Disclosure of Government Assistance*. They are recognized as assets of the operator, measured at fair value on initial recognition. The operator shall recognize a liability in respect of unfulfilled obligation it has assumed in exchange for the assets.

The operator shall recognize and measure revenue in accordance with IAS 11, *Construction Contracts,* and IAS 18, *Revenue,* for the services it performs. If the operator performs more than one service (i.e., construction or upgrade and operation services) under a single contract or arrangement, consideration received or receivable shall be allocated by reference to the relative fair values of the services delivered, when the amounts are separately identifiable. The nature of the consideration, as a financial asset or an intangible asset, determines its subsequent accounting treatment, which will be discussed in the subsequent sections.

The operator may have contractual obligations it must fulfill as a condition of its license (a.) to maintain the infrastructure to a specified level of serviceability; or (b.) to restore the infrastructure to a specified condition before it is handed over to the grantor at the end of the service arrangement. At the end of the arrangement, the residual interest in any infrastructure constructed as part of the arrangement is controlled by the grantor, not the operator.

TYPES OF CONCESSION ARRANGEMENTS

If the operator provides construction or upgrade services, the consideration received or receivable by the operator shall be recognized at its fair value. The consideration may be rights to:

1. A financial asset, or
2. An intangible asset

Financial Asset

Specifically, a financial asset is an unconditional contractual right to receive a specified or determinable amount of cash or another financial asset from the government in return for constructing or upgrading a public sector asset, and then operating and maintaining the asset for a specified period of time. The operator has an unconditional right to receive cash if the grantor contractually guarantees to pay the operator, over the life of the arrangement,

a) Specified or determinable amounts; or

b) The shortfall, if any, between amounts received from users of the public service and specified or determinable amounts, even if payment is contingent on the operator ensuring that the infrastructure meets specified quality or efficiency requirements.

Under this category, the payments received by the operator are recognized as partial repayments of the financial asset.

The amount due from or at the direction of the grantor is accounted for in accordance with IFRS 9, *Financial Instruments,* as

- At amortized cost; or
- At fair value through profit or loss

If the amount due from the grantor is accounted for at amortized cost, IFRS 9 requires interest calculated using the effective interest method to be recognized in profit or loss.

Intangible Asset

On the other hand, an intangible asset is a right or license to charge for use of a public sector asset that it constructs or upgrades and then must operate and maintain for a specified period of time. A right to charge users of the public service is not an unconditional right to receive cash because the amounts are contingent on the extent to which the public uses the service. The operator measures the intangible asset, initially, at fair value.

IFRIC 12, allows that both types of arrangement may exist within a single contract, that is, to the extent that the government has given an unconditional guarantee of payment for the construction of the public sector asset. the operator has a financial asset; and to the extent that the operator has to rely on the public using the service in

order to obtain payment, the operator has an intangible asset. If the operator is paid for the construction service partly by a financial asset and partly by an intangible asset, it is necessary to account separately for each component of the operator's consideration. The consideration received or receivable for both components shall be recognized initially at fair value of the consideration. The nature of the consideration given by the grantor to the operator shall be determined by reference to the contract terms and, when it exists, relevant contract law.

Accounting by the government (grantor)

IFRIC 12 does not address accounting for the government side of service concession arrangements. PFRSs are not designed to apply to not-for-profit activities in the private sector or the public sector. The Government Accounting Manual (GAM) issued by Commission on Audit (COA) shall govern the accounting treatment by the government of the infrastructure asset as its property, plant and equipment.

Comparison of Infrastructure Assets			
	Financial Asset	Intangible Asset	Compound Financial Asset & Intangible Asset
Criteria	Contractual Right to Receive Cash or Financial Asset	License to Charge the Users of Infrastructure Asset	Combined Characteristics of Financial Asset and Intangible Asset
Accounting Treatment	PFRS 9: FAFVPL or FAFVOCI or FAAC	PAS 38: Cost Model or Revaluation Model	Bifurcate the Financial Asset Component and Intangible Asset Component
Revenue	Financing or Interest Revenue	Service Revenue collected from the public	Both Interest Revenue and Service Revenue

Accounting Models of Infrastructure Asset classified as Intangible Asset (PAS 38)		
	Cost Model	Revaluation Model
Initial Measurement	Historical Cost	Historical Cost
Subsequent Measurement	Cost - Accumulated Depreciation - Accumulated Impairment	Fair Value or Sound Value or Amortized Replacement Cost - Subsequent Depreciation - Subsequent Impairment
Amortization	Yes	Yes
Impairment	Yes	Yes
Revaluation Surplus	None	Yes in OCI without RA (RE)

Accounting Models of Infrastructure Asset classified as Financial Asset (PFRS 9)			
	FAFVPL	FAFVOCI	FAAC
Business Models (Criteria for Classification)	To obtain short-term gain or loss on changes in fair value	To collect contractual cash flows from principal and interest and to sell the investment to obtain gain or loss on changes in fair value	To collect contractual cash flows from principal and interest
Classification	Current Asset	Noncurrent Asset	Noncurrent Asset
Initial Measurement	Fair Value	Fair Value plus Transaction Cost	Fair Value plus Transaction Cost

Transaction Cost	Expensed as incurred	Capitalizable	Capitalizable
Interpolation of Effective Interest Rate	No	Yes	Yes
Subsequent Measurement	Fair Value	Fair Value	Amortized Cost
Interest Income	Nominal Interest (Face Value x Stated Rate)	Effective Interest (Amortized Cost x Effective Interest Rate)	Effective Interest (Book Value x Effective Interest Rate)
Amortization of Discount or Premium	None	Yes	Yes
Gain or Loss on Changes in Fair Value	Yes in P/L	Yes in OCI with RA (P/L)	None

MULTIPLE CHOICE – Theory of Accounts

TOA 18-1 (IFRIC)

It is an arrangement whereby a government or other public sector body contracts with a private operator to develop or upgrade, operate and maintain the grantor's infrastructure assets, such as roads, bridges, tunnels, airport, etc.

a. Service concession
b. Government grant
c. Government assistance
d. Loan

TOA 18-2 (IFRIC)

According to IFRIC 12, *Service Concession Arrangement*, the infrastructure asset shall be recognized by the operator as

a. Property, plant and equipment
b. Financial asset
c. Intangible asset
d. Either financial asset or intangible asset

TOA 18-3 (IFRIC)

It is a type of service concession arrangement whereby the operator receives a right to charge for use of a public sector asset that it constructs or upgrades and then must operate and maintain for a specified period of time.

a. Property, plant and equipment
b. Financial asset
c. Intangible asset
d. Either financial asset or intangible asset

TOA 18-4 (IFRIC)

Under a financial asset model of service concession arrangement, the operator has an unconditional right to receive cash if the grantor contractually guarantees to pay the operator

a. Specified or determinable amounts.
b. The shortfall between amounts received from users of the public service and specified or determinable amounts.
c. Either specified/determinable amounts or the shortfall between amounts received from users of public service and specified/determinable amounts.
d. Neither specified/determinable amounts nor the shortfall between amounts received from users of public service and specified/determinable amounts.

TOA 18-5 (IFRIC)

A feature of service concession arrangement is the public service nature of the obligation undertaken by the operator. Which of the following is one of the other common features under IFRIC 12, *Service Concession Arrangement*?

a. The party that grants the service concession arrangement is a public sector, like government body.
b. The party that grants the service concession arrangement is a public sector or a private sector entity to which the responsibility for the service has been devolved.
c. The grantor is responsible for at least some of the management of the infrastructure and related services.
d. The contract sets the initial prices to be levied by the grantor and regulates price revisions over the period of the service arrangement.

TOA 18-6 (IFRIC)

In some cases, the grantor may provide other items to the service concession operator. If such assets form part of the consideration payable by the grantor for the services, these assets are recognized as

a. Government grants
b. Government assistance
c. Assets of the operator measured at fair value on initial recognition
d. Government loan

TOA 18-7 (Author)

IFRIC 12 is an arrangement whereby a government or other public sector body contracts with a private operator to develop (or upgrade), operate and maintain the grantor's infrastructure assets such as roads, bridges, tunnels, airports, energy distribution networks, prisons or hospitals.

a. Joint arrangement
b. Service concession arrangement
c. Consignment arrangement
d. Business arrangement

TOA 18-8 (Author)

Under IFRIC 12, if the concession arrangement provides that the operator has an unconditional contractual right to receive a specified or determinable amount of cash or another financial asset from the government in return for constructing or upgrading a public sector asset, and then operating and maintaining the asset for a specified period of time, the infrastructure asset shall be accounted for by the operator as

a. Property, plant and equipment
b. Intangible asset
c. Financial asset
d. Prepaid asset

TOA 18-9 (Author)

Under IFRIC 12, if the concession arrangement provides that the operator has a right to charge for use of a public sector asset that it constructs or upgrades and then must operate and maintain for a specified period of time but the right is not an unconditional right to receive cash because the amounts are contingent on the extent to which the public uses the service, the infrastructure asset shall be accounted for by the operator as

a. Property, plant and equipment
b. Intangible asset
c. Financial asset
d. Prepaid asset

TOA 18-10 (Author)

The Philippine government granted a concession arrangement to MRT7 Inc. which will construct the mass train transportation and will be authorized to operate it for a period of 50 years. The arrangement provides that MRT7 Inc. receives a right or a license to charge users of the public service but there is no an unconditional right to receive cash because the amounts will be contingent on the extent that the public uses the service. How shall MRT7 Inc., the operator, account for its infrastructure asset?

a. It shall be recognized as property, plant and equipment by the operator.
b. It shall be recognized as financial asset at fair value by the operator.
c. It shall be recognized as financial asset at amortized cost by the operator.
d. It shall be recognized as intangible asset of the operator.

TOA 18-11 (Author)

The Philippine government granted a concession arrangement to Makati Med Inc. which will construct a hospital and will be authorized to operate it for a period of 10 years. The arrangement provides that Makati Med Inc. will provide medical services to underprivileged members of the community for free. In exchange, Makati Med Inc. has an unconditional contractual right to receive cash or another financial asset from or at the direction of the Philippine government for the construction services and medical services. How shall MRT7 Inc., the operator, account for its infrastructure asset?

a. It shall be recognized as property, plant and equipment by the operator.
b. It shall be recognized as intangible asset of the operator.
c. It shall be recognized as Investment in stocks at cost method of the operator.
d. It shall be recognized as financial asset either at FAFVP/L, or FAFVOCI, or FA @ amortized cost depending on the business model of the operator.

MULTIPLE CHOICE – Problems

PROB. 18-1 (Author)

The Philippine Government and Heaven's Path Inc. entered into a concession arrangement for the construction and operation of Skyway 4 connecting Tawi-Tawi and Batanes. On December 31, 2018, the concession operator constructed the Skyway 4 at a cost of P100M. Heaven's Path Inc. has a right or license to charge users over the term of the arrangement of 50 years. The amounts to be received by the concession operator are contingent on the extent that the public uses the Skyway 4. During 2020, the concession operator collected toll fees amounting to P10,000,000 from the motorists.

a. What is the book value of infrastructure asset on December 31, 2020?
   a. 98,000,000
   b. 96,000,000
   c. 94,000,000
   d. 92,000,000

b. what is the revenue to be presented by the concession operator for the year ended December 31, 2020?
   a. 2,000,000
   b. 10,000,000
   c. 4,000,000
   d. 6,000,000

PROB. 18-2 (Author)

The Philippine Government and St. Lukes Inc. entered into a concession arrangement for the construction and operation of Pro-poor Hospital for a period of 20 years. On December 31, 2020, the concession operator constructed the Hospital at a cost of P48M and incurred transaction cost amounting to P1M. The arrangement stipulates that St.Lukes Inc. will be paid a specified amount that will enable it to recover the investment made provided that is has a pre-determined minimum order of hospital beds operating and available. St. Lukes has a guaranteed right to receive P8M every end of the year. The interpolated effective interest rate is 10%.

a. What is the book value of infrastructure asset on December 31, 2021?
   a. 49,000,000
   b. 53,900,000
   c. 45,900,000
   d. 41,000,000

b. What is the revenue to be presented by the concession operator for the year ended December 31, 2021?
   a. 2,450,000
   b. 8,000,000
   c. 4,000,000
   d. 4,900,000

ANSWERS – Theory of Accounts

TOA 18-1 *Suggested answer (a)*

This is the definition of Service Concession Arrangement provided by IFRIC 12, Service Concession Arrangement. Paragraph 2, further provides that such arrangement is often described as a "build-operate-transfer", a "rehabilitate-operate-transfer", or a "public-to-private" service concession arrangement.

TOA 18-2 *Suggested answer (d)*

According to IFRIC 12, paragraph 15, if the operator provides construction or upgrade services, the consideration received or receivable by the operator may be rights to (a.) financial asset; or (b.) intangible asset. On the other hand, paragraph 18 states that the operator may be paid for the construction services partly by a financial asset and partly by an intangible asset.

TOA 18-3 *Suggested answer (c)*

This is the definition of intangible assets provided by IFRIC 12, Service Concession Arrangement.

TOA 18-4 *Suggested answer (c)*

*According to IFRIC 12, paragraph 16, The operator has an unconditional right to receive cash if the grantor contractually guarantees to pay the operator, over the life of the arrangement, (a.) specified or determinable amounts; **or** (b.) the shortfall, if any, between amounts received from users of the public service and specified or determinable amounts, even if payment is contingent on the operator ensuring that the infrastructure meets specified quality or efficiency requirements.*

TOA 18-5 *Suggested answer (b)*

According to IFRIC 12, paragraph 3, other common features are:

a) *The party that grants the service arrangement is a public sector entity, including governmental body, or a private sector entity to which the responsibility for the service has been devolved.*
b) *The* ***operator*** *is responsible for at least some of the management of the infrastructure and related services and does not merely act as an agent on behalf of the grantor.*
c) *The contract sets the initial prices to be levied by the* ***operator*** *and regulates price revisions over the period of the service arrangement.*
d) *The operator is obliged to hand over the infrastructure to the grantor in a specified condition at the end of the period of the arrangement, for little or no incremental consideration, irrespective of which party initially financed it.*

TOA 18-6 *Suggested answer (c)*

According to IFRIC 12, paragraph 27, the grantor may also provide other items to the operator that the operator can keep or deal with as it wishes. If such assets form part of the consideration payable by the grantor for the services, they are not government grants as defined in IAS 20, Accounting for Government Grants and Disclosure of Government Assistance. They recognized as assets of the operator, measured at fair value on initial recognition.

TOA 18-7 *Suggested answer (b) Service concession arrangement*

TOA 18-8 *Suggested answer (c) Financial asset*

TOA 18-9 *Suggested answer (b) (Intangible asset)*

TOA 18-10 *Suggested answer (d) It shall be recognized as intangible asset of the operator*

TOA 18-11 *Suggested answer (d) It shall be recognized as financial asset either at FAFVP/L, or FAFVOCI, or FA @ amortized cost depending on the business model of the operator.*

SOLUTIONS – Problems

PROB. 18-1

a. *Suggested answer (b) 96,000,000*

Historical cost of intangible asset	100,000,000
Less accumulated amortization as of Dec. 31, 2020 (100,000,000/50 x 2 years)	4,000,000
Book value of intangible asset, December 31, 2020 (under the cost model)	96,000,000

b. *Suggested answer (b) 10,000,000*

Toll fee revenue from license or right to collect from public user	10,000,000

PROB. 18-2

a. *Suggested answer (c) 45,900,000*

Fair value plus transaction cost of financial asset at amortized cost (48,000,000 + 1,000,000)	49,000,000
Add effective interest revenue (49,000,000 x 10%)	4,900,000
Total	53,900,000
Less cash collected from government – grantor	8,000,000
Book value of financial asset at amortized cost, 12/31/2021	45,900,000

b. *Suggested answer (d) 4,900,000*

Interest revenue of financial asset at amortized cost for the year ended December 31, 2021 (4,900,000 x 10%)	4,900,000

CHAPTER 19

FOREIGN CURRENCY TRANSACTIONS AND TRANSLATION OF FOREIGN CURRENCY FINANCIAL STATEMENTS

Introduction

An entity may carry on foreign activities in two ways. It may have transaction in foreign currencies or it may have foreign operations. In addition, an entity may present its financial statements in a foreign currency. The objective of PAS 21 is to prescribe how to include foreign currency transactions and foreign operations in the financial statements of an entity and how to translate financial statements into a presentation currency (the currency in which financial statements are presented). The principal issues are, which exchange rate(s) to use and how to report the effects of changes in exchange rates in the financial statements.

The standard shall be applied

1- In accounting for transactions and balances in foreign currencies, except for those derivative transactions and balances that are within the scope of IAS 39, *Financial Instruments: Recognition and Measurement*;
2- In translating the results and financial position of foreign operations that are included in the financial statement of the entity by consolidation, proportionate consolidation or the equity method; and
3- In translating an entity's results and financial position into a presentation currency. IAS 39 applies to hedge accounting.

THE FUNCTIONAL CURRENCY

The overall approach required by IAS 21 is for an entity to translate foreign currency items and transactions into its functional currency.

A *functional currency* is the currency of the primary economic environment in which the entity operates and *the primary economic environment* is normally the one in which it primary generates and expends cash. The term "functional currency" is used

SOLUTIONS – Problems

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The overall approach required by IAS 21 is for an entity to translate foreign currency items and transactions into its functional currency.

A *functional currency* is the currency of the primary economic environment in which the entity operates and *the primary economic environment* is normally the one in which it primary generates and expends cash. The term "functional currency" is used

in place of "measurement currency" because it is the more commonly used term, but with essentially the same meaning.

In a group, an entity needs to determine its own functional currency rather than adopting a single one which is common across the whole group. An entity cannot choose its functional currency; instead management needs to make an informed assessment of the facts. A functional currency is based on entity's underlying economic activity, thus, it cannot be changed unless its underlying economic activities changes. If the underlying economic activities change in such a way that there is a change in the functional currency of an entity, the new functional currency should be applied prospectively from the date of the change in circumstances. The entity should not restate amounts previously recorded as these reflected the economic reality at that time.

Among the practical indicators that may be considered in identifying the functional currency include the following:

- The currency that mainly influences the prices at which goods and services are sold.
- The currency of the country whose competitive forces and regulations mainly influence the pricing structure for the supply of goods and services.
- The currency that mainly influences labor, material and other cost of providing goods and services.
- The currency in which financing is generated; and
- The currency in which cash generated from an entity's operating activities is usually retained.

The functional currency of the foreign operation is not always the same as that of the reporting entity or group. The overriding factor for this is whether the foreign operations operates independently of the reporting entity or is merely an extension of that entity. Where an entity is not deemed to be autonomous of the reporting entity (parent), it will have the same functional currency as the parent.

THE PRESENTATION CURRENCY

Although the overall approach required by IAS 21 is for an entity to translate foreign currency items and transactions into its functional currency, it is not required to present its financial statements using this currency. An entity has a complete free choice of the currency in which its financial statements are presented, which known as *presentation currency*.

TOA 19-25 (Adapted)

Where the hedge arrangement completely eliminates the consequences of adverse exchange rate fluctuations, the purchase or sales arrangement is considered to be:

a. Partially hedged
b. Positively hedged
c. Perfectly hedged
d. Negatively hedged

TOA 19-26 (Adapted)

Which of the following items is not a required condition for applying hedge accounting?

a. The hedge is expected to be highly effective.
b. The forecast transaction does not affect profit or loss.
c. The effectiveness of the hedge can be reliably measured.
d. The hedge is assessed on an ongoing basis.

TOA 19-27 (Adapted)

For a cash flow hedge relating to the purchase of a particular asset, foreign exchange gains and losses made on the hedging instrument:

a. Are all passed to profit or loss.
b. Are passed to equity accounts up to the time of the underlying transaction, at which time they are then included as part of the cost of the asset. After this date, they are passed directly to profit or loss.
c. Are all passed to the cost of the asset.
d. Are passed directly to profit or loss up to the time of the expiration of the hedging instrument, at which time they are then included as part of the cost of the asset.

TOA 19-28 (Author)

TRANSLATION FROM FUNCTIONAL CURRENCY TO THE PRESENTATION CURRENCY

An entity may present its financial statements in any currency (or currencies). If the presentation currency differs from the entity's functional currency, it translates its results and financial position into the presentation currency. The results and financial position of an entity whose functional currency is not the currency of a hyperinflationary economy shall be translated into a different presentation currency using the following procedures:

- Assets and liabilities for each statement of financial position presented shall be translated at the closing rate at the date of that statement.

- Income and expense for each statement presenting profit or loss and other comprehensive income shall be translated at exchange rate at the date of the transactions (or at an average rate for the period when it is a reasonable approximation; however if exchange rate fluctuates significantly, the use of average rate is inappropriate); and

- All exchange differences resulting from (1.) translating income and expenses at the exchange rates at the dates of the transactions and assets and liabilities at the closing rate; and (2.) translating the opening net assets at a closing rate that differs from the previous closing rate; shall be recognized in other comprehensive income.

  These exchange differences are not recognized in profit or loss because the changes in exchange rates have little or no direct effect on the present and future cash flows from operations. The cumulative amount of the exchange differences is presented in a separate component of equity until disposal of the foreign operation.

Special rules apply for translating the results and financial position of an entity whose functional currency is the currency of a hyperinflationary economy into a different presentation currency. Where the foreign entity reports in the currency of a hyperinflationary economy, the financial statements of the foreign entity should be restated as required by PAS 29 *Financial Reporting in Hyperinflationary Economies*, before translation into the reporting currency.

When a foreign operation is disposed of, the cumulative amount of the exchange differences recognized in other comprehensive income and accumulated in the separate component of equity relating to that foreign operation shall be recognized in profit or loss when the gain or loss on disposal is recognized.

HEDGE ACCOUNTING

IAS 39, *Financial Instruments: Recognition and Measurement,* applies to hedge accounting. Hedge accounting recognizes the offsetting effects on profit or loss of changes in the fair values of the hedging instrument and the hedged item.

Hedging Instruments

Hedging instrument is an instrument whose fair value or cash flows are expected to offset changes in the fair value or cash flows of a designated hedged item. All derivative contracts with an external counterparty may be designated as hedging instruments except for some written options. A non-derivative financial asset or liability may not be designated as a hedging instrument except as a hedge of foreign currency risk.

For hedge accounting purposes, only instruments that involve a party external to the reporting entity can be designated as a hedging instrument. This applies to intragroup transactions as well (with the exception of certain foreign currency hedges of forecast intragroup transactions – see below). However, they may qualify for hedge accounting in individual financial statements.

Hedged items

Hedged item is an item that exposes the entity to risk of changes in fair value or future cash flows and is designated as being hedged. [IAS 39.9]

A hedged item can be:

- a single recognized asset or liability, firm commitment, highly probable transaction or a net investment in a foreign operation
- a group of assets, liabilities, firm commitments, highly probable forecast transactions or net investments in foreign operations with similar risk characteristics
- a held-to-maturity investment for foreign currency or credit risk (but not for interest risk or prepayment risk)

instrument decreased by P10,255.

c. Fair value of shares decreased by P12,316; fair value of hedging instrument increased by P15,325.
d. Fair value of shares decreased by P11,999; fair value of hedging instrument increased by P13,225.

TOA 19-36 (SME)

According to IFRS/PFRS for SMEs, Section 30, *Foreign Currency Translation,* an entity can conduct foreign activities in two ways. They are:

a. Reporting purchase price parity and reporting foreign interest rate adjustments.
b. Accounting for foreign currency debt and offshore financing.
c. Accounting for foreign currency transactions and translating the accounts of foreign operations.
d. Accounting for foreign currencies using the forex buy rate and the forex sell rate.

TOA 19-37 (SME)

Under IFRS/PFRS for SMEs, Section 30, *Foreign Currency Translation,* which of the following is not a factor an entity considers in determining its functional currency?

a. The currency that mainly influences sales prices for goods and services.
b. The currency of the country whose competitive forces and regulations mainly determine the sales prices of its goods and services.
c. The currency that mainly influences labor, material and other costs of providing goods and services.
d. The currency in which funds from financing activities are generated.

TOA 19-38 (SME)

IFRS/PFRS for SMEs, Section 30, *Foreign Currency Translation,* provides that a foreign currency transaction shall be recorded on initial recognition in the

a. Presentation currency
b. Local currency
c. Foreign currency
d. Functional currency

MULTIPLE CHOICE – Problems

PROB. 19-1 (RPCPA)

If one Taiwanese dollar can be exchanged for P1.025, the fraction for computing indirect quotation of exchange rate expressed in Taiwanese currency would be:

a. 0.975/1.00
b. 1.00/0.975
c. 1.00/1.025
d. 1.025/1.00

PROB. 19-2 (RPCPA)

Filcraft Corp. sold metal crafts to a US firm for $70,000 and pertinent information on exchange conversion rates related to this transaction were as follows:

		Conversion Rate (Peso to US$)
Nov. 4	Receipt of order	P27.40
Nov. 22	Date of shipment	27.50
Dec. 31	Balance sheet date	27.60
Jan. 6	Date of collection	27.00

The sale would be appropriately recorded at:

a. 1,890,000
b. 1,918,000
c. 1,925,000
d. 1,932,000

PROB. 19-3 (AICPA)

On September 1, 2019, Bain Corp. received an order for equipment from a foreign customer for 300,000 local currency units (LCU) when the peso equivalent was P96,000. Bain shipped the equipment on October 15, 2019, and billed the customer for 300,000 LCU when the peso equivalent was P100,000. Bain received the customer's remittance in full on November 16, 2019, and sold

- Where the net position of a group of items containing offsetting risk positions is designated as the hedged item, the cash flow hedge model can only be applied to the hedge of foreign currency risk. The designation of that net position must specify both the reporting period in which the forecast transactions are expected to affect P&L and also the nature and volume that are expected to affect P&L in each period. Hedging gains or losses must be presented in a separate line item in the statement of P&L and OCI.

- For cash flow hedges of a group of items with no offsetting risk position, the presentation of hedging gains or losses are apportioned to the line items affected by the hedged items.

3. Hedge on a net investment in a foreign operation (as defined in IAS 21).

   Hedges of a net investment in a foreign operation, including a hedge of a monetary item that is accounted for as part of the net investment shall be *accounted for similarly to cash flow hedge*; that is the portion of the gain or loss determined to be an effective hedge shall be recognized in other comprehensive income; while the ineffective portion shall be recognized in profit or loss. The gain or loss on the hedging instrument relating to the effective portion of the hedge that has been recognized in other comprehensive income shall be reclassified from equity to profit or loss as a reclassification adjustment on disposal or partial disposal of the foreign operation.

   A hedge of the foreign currency risk of a firm commitment may be accounted for as fair value hedge or cash flow hedge.

NET INVESTMENT IN A FOREIGN OPERATION

An entity may have a monetary amount receivable from, or payable to, a foreign entity that is not intended to be settled in the foreseeable future. For a receivable, this amount essentially forms part of the overall investment in the foreign entity. At the end of the period, monetary amounts such as this are retranslated and any differences recognized in profit or loss of the appropriate entity. But IAS 21 operates on the basis that as such differences are part of the overall investment in the foreign entity,

they should only be recognized in profit or loss when the foreign entity is disposed of.

In the preparation of the consolidated financial statements, any exchange difference arising from the net investment in a foreign operation should be reported initially in other comprehensive income and not the consolidated profit or loss for the period. If the foreign entity is subsequently disposed, any such exchange differences will form part of the reported profit or loss on disposal by reclassifying the amount from equity to profit or loss.

An amendment was made to IAS 21 in December 2005 in relation to loans considered to be part of the net investment in a foreign entity. The amendment confirmed that the loan could be made by a group entity other than the parent entity. It is the only difference relating to the overall investment in the foreign entity which is recognized in other comprehensive income. The differences on intra-group trading balances which will be settled in the short term remain in the profit or loss of the period.

ACCOUNTING FOR SMALL AND MEDIUM-SIZED ENTITIES (SMEs)

An entity can conduct foreign activities in two ways: (1.) it may have transactions in foreign currencies, or (2.) it may have foreign operations. IFRS/PFRS for SMEs, Section 30, *Foreign Currency Translation,* prescribes how to include foreign currency transactions and foreign operations in the financial statements of an entity and how to translate financial statements into a *presentation currency.* Accounting for financial instruments that derive their value from the change in a specified foreign exchange rate (e.g., foreign currency forward exchange contracts) and hedge accounting of foreign currency items are dealt with in Section 12, *Other Financial Instruments* issues.

Each entity shall identify its functional currency. Among the practical indicators that may be considered in identifying the functional currency include the following:

- The currency that mainly influences the prices at which goods and services are sold.
- The currency of the country whose competitive forces and regulations mainly influence the pricing structure for the supply of goods and services.
- The currency in which financing is generated; and

a. 26.54
b. 26.60
c. 26.63
d. 26.75

PROB. 19-9 (RPCPA)

Local Corp. imported a heavy machine from the US for US$50,000 on October 10, 2019. A letter of credit was opened with a Makati branch based on the commercial invoice for US$50,000, on which Local Corp. made a 100% deposit cover based on the exchange rate of $1.00 to P27.50. Shipment of the heavy machine was effected on December 30, 2019, at which time the exporter collected the proceeds of the letter of credit when the prevailing exchange rate was $1.00 to P28.00. From the exchange rate fluctuation, Local Corp. realized:

a. No gain, no loss
b. A P5,000 gain
c. A P25,000 gain
d. A P25,000 loss

PROB. 19-10 (IAS)

The White Co. has the Philippine pesos as its functional currency. On October 16, 2019, White ordered some inventory from a foreign supplier and agreed a purchase price of 160,000 local currency units (LCU). The inventory was received on November 15, 2019. At December 31, 2019, the inventory remained on hand and the trade payable balance for the inventory purchase remained outstanding. The supplier was paid on January 27, 2020 and the inventory was sold on January 31, 2020. The following information about exchange rates is available:

October 16, 2019	P1.00 = 2.60 LCU
November 15, 2019	P1.00 = 2.50 LCU
December 31, 2019	P1.00 = 2.40 LCU
January 27, 2020	P1.00 = 2.25 LCU

According to IAS 21, The Effects of Changes in Foreign Exchange Rates, at what amount should the trade payable balance due to the supplier be presented in the statement of financial position at December 31, 2019?

a. 61,538

b. 64,000
c. 66,667
d. 71,111

PROB. 19-11 (RPCPA)

On June 15, 2020, Boni Co. purchased merchandise worth 100,000 Swiss francs from its supplier in Switzerland payable within 30 days under an open account arrangement. Boni issued a 30-day, 6% note payable in Swiss francs. On July 15, 2020, Boni paid the note in full. The following information in spot rates (P/SF) is provided:

	Buying	Selling
June 15, 2020	P 24.03	P 24.15
July 15, 2020	24.10	24.22

What is Boni's foreign exchange gain (loss) for the transaction?

a. (5,040)
b. 12,075
c. (7,035)
d. (19,110)

PROB. 19-12 (AICPA)

Ball Corp. had the following foreign currency transactions during 2019:

- Merchandise was purchased from a foreign supplier on January 20, 2019, for the Philippine peso equivalent of P90,000. The invoice was paid on March 20, 2019, at the Philippine peso equivalent of P96,000.

- On July 1, 2019, Ball borrowed the Philippine peso equivalent of P500,000 evidenced by a note that was payable in the lender's local currency on July 1, 2020. On December 31, 2019, the Philippine peso equivalents of the principal amount and accrued interest were P520,000 and P26,000, respectively. Interest on the note is 10% per annum.

In Ball's 2019 income statement, what amount should be included as foreign exchange transaction loss?

a. 0

MULTIPLE CHOICE – Theory of Accounts

TOA 19-1 (Adapted)

IAS 21, *The Effects of Changes in Foreign Exchange Rates,* requires that the initial recognition of a foreign currency transaction be:

a. In the amount of the foreign currency.
b. The closing rate at balance sheet date.
c. The rate the currency is expected to be exchanged at on the settlement date for the monetary assets or liability based on the current market price of future contracts for the relevant foreign currency.
d. The spot rate at the date of the transaction.

TOA 19-2 (Adapted)\

IAS 21, *The Effects of Changes in Foreign Exchange Rates,* requires that foreign currency monetary items outstanding at reporting date must be:

a. Translated at the spot rate at the transaction date.
b. Reported at the forward-exchange rate based on the 90-day bank bill at that date.
c. Translated at the spot rate at reporting date.
d. Translated at the spot rate at settlement date.

TOA 19-3 (IAS)

An entity will primarily generate and expend cash in one primary economic environment. According to IAS 21, *The Effects of Changes in Foreign Exchange Rates,* the correct term for the currency of this primary economic environment is the

a. Presentation currency
b. Functional currency
c. Reporting currency
d. Foreign currency

TOA 19-4 (Author)

IAS 21 defines it as the currency in which the financial statements are presented.

a. Foreign currency
b. Presentation currency
c. Functional currency
d. Legal tender

TOA 19-5 (Author)

IAS 21 defines it as the currency other than the functional currency of the entity.

a. Foreign currency
b. Presentation currency
c. Functional currency
d. Legal tender

TOA 19-6 (Author)

Under IAS 21, what is the initial measurement of foreign currency transaction?

a. Historical rate for monetary items and closing rate for nonmonetary items
b. Historical rate for nonmonetary items and closing rate for monetary items
c. Historical rate for both monetary items and nonmonetary items
d. Closing rate for both monetary items and nonmonetary items

TOA 19-7 (Author)

Under IAS 21, what is the subsequent measurement of foreign currency denominated monetary items?

a. Historical rate
b. Closing rate
c. Average rate
d. Opening rate

a.	(400,000)	0
b.	600,000	200,000
c.	(600,000)	200,000
d.	(600,000)	0

PROB. 19-17 (Author)

On November 1, 2020, an entity acquired on account goods from a foreign supplier at a cost of $1,000. The accounts payable are paid on January 30, 2021.

On December 1, 2020, an entity sold on account the said goods to a foreign customer at a selling price of $1,500. The accounts receivable are collected on February 28, 2021.

The entity is operating in Philippine economy wherein the functional currency is the Philippine Peso.

The following direct exchange rates are provided:

	11/1/2020	12/1/2020	12/31/2020	1/30/2021	2/28/2021
Buying spot rate	P40	P39	P45	P43	P42
Selling spot rate	P42	P40	P47	P46	P45

a. What is the sales revenue to be reported by the entity for the year ended December 31, 2020?
   a. 58,500
   b. 60,000
   c. 67,500
   d. 72,000

b. What is the cost of sales to be reported by the entity for the year ended December 31, 2020?
   a. 40,000
   b. 42,000

c. 45,000
d. 47,000

c. What is the book value of account receivable on December 31, 2020?
   a. 58,500
   b. 60,000
   c. 67,500
   d. 72,000

d. What is the book value of accounts payable on December 31, 2020?
   a. 40,000
   b. 42,000
   c. 45,000
   d. 47,000

e. What is the net foreign currency gain or (loss) for the year ended December 31, 2020?
   a. 4,000
   b. 5,000
   c. 3,000
   d. 6,000

PROB. 19-18 (AICPA)

Fay Corp. had a realized foreign exchange loss of P15,000 for the year ended December 31, 2019 and must also determine whether the following items will require year-end adjustment:

- Fay had P8,000 loss resulting from the translation of the accounts of its wholly owned foreign subsidiary for the year ended December 31, 2019.

- Fay had an account payable to an unrelated foreign supplier payable in the supplier's local currency. The Philippine peso equivalent of the payable was P64,000 on the October 31, 2019 invoice date, and it was P60,000 on December 31, 2019. The invoice is payable on January 30, 2020.

In Fay's 2019 consolidated income statement, what amount should be included as foreign exchange loss?

Under IAS 21, adjustments arising from translating functional currency into presentation currency shall be presented in

a. Other comprehensive income with reclassification adjustment
b. Other comprehensive income without reclassification adjustment
c. Retained earnings
d. Profit or loss

TOA 19-17 (Author)

Under IAS 21, translations adjustments arising from translating functional currency into presentation currency if realized shall be reclassified in

a. Other comprehensive income
b. Share premium
c. Retained earnings
d. Profit or loss

TOA 19-18 (AICPA)

On October 1, 2019, Mild Co., purchased machinery from a foreign company with payment due on April 1, 2020. If Mild's 2019 operating income included no foreign currency transaction gain or loss, the transaction could have been

a. Resulted in an extraordinary gain.
b. Been denominated in Philippine pesos.
c. Cause a foreign currency transaction gain to be reported as a contra account against machinery.
d. Caused a foreign currency translation gain to be reported in other comprehensive income.

TOA 19-19 (Adapted)

On October 1, 2019, Velec Co. contracted to purchase foreign goods requiring payment in local current units (LCU) one month after the receipt of the goods at Velec's factory. Title to the goods passed on December 15, 2019. The goods were still in transit on December 31, 2019. Exchange rates were one peso to 22 LCUs, 20 LCUs, and 21 LCUs on October 1, December 15, and December 31, 2019, respectively. Velec should account for the exchange rate fluctuation in 2019 as

a. An ordinary loss included in net income.
b. An ordinary gain included in net income.
c. An extraordinary gain.
d. An extraordinary loss.

TOA 19-20 (IAS)

According to IAS 21, *The Effects of Changes in Foreign Exchange Rates*, at which rate should an entity's non-current assets be translated when its functional currency figures are being translated into different presentation currency?

a. The historical rate
b. The closing rate
c. The average rate
d. The spot exchange rate

TOA 19-21 (AICPA)

In preparing consolidated financial statements of a Philippine parent company with a foreign subsidiary, the foreign subsidiary's functional currency is the currency

a. In which the subsidiary maintains its accounting records.
b. Of the country in which the subsidiary is located.
c. Of the country in which the parent is located.
d. Of the environment in which the subsidiary primarily generates and expends cash.

TOA 19-22 (AICPA)

A foreign subsidiary's functional currency is its local currency, which has not experienced significant inflation. The weighted average exchange rate for the current year is the appropriate exchange rate for translating

	Wages expenses	Sales to customers
a.	Yes	No
b.	Yes	Yes
c.	No	Yes
d.	No	No

PROB. 19-22 (Adapted)

Manila Corp., a wholly-owned subsidiary of Asia, Inc. in California, USA, has certain expense accounts for the year ended December 31, 2019, stated in US dollars as follows:

	US dollars
Selling expenses	360,000
Salaries and wages	600,000
Depreciation expense	240,000

The exchange rates at various dates are as follows:

	Peso equivalent of 1 US dollar
December 31, 2019	P 40.00
Average for year ended 12/31/2019	35.00
January 1, 2019	25.00

Assume that the charges to the expense accounts occurred approximately evenly during the year. What total peso amount should be included in Asia's 2019 consolidated income statement to reflect these expenses?

a. 30,000,000
b. 39,000,000
c. 42,000,000
d. 48,000,000

PROB. 19-23 (IAS)

The Will Co. acquired a foreign subsidiary on August 15, 2019. Goodwill arising on the acquisition was P175,000. Consolidated financial statements are prepared at the year end of December 31, 2019 requiring the translation of all foreign operations' results into presentation currency of Philippine pesos.

The following rates of exchange have been identified:

August 15, 2019	1.321 LCU = P1.00
December 31, 2019	

TOA 19-25 (Adapted)

Where the hedge arrangement completely eliminates the consequences of adverse exchange rate fluctuations, the purchase or sales arrangement is considered to be:

a. Partially hedged
b. Positively hedged
c. Perfectly hedged
d. Negatively hedged

TOA 19-26 (Adapted)

Which of the following items is not a required condition for applying hedge accounting?

a. The hedge is expected to be highly effective.
b. The forecast transaction does not affect profit or loss.
c. The effectiveness of the hedge can be reliably measured.
d. The hedge is assessed on an ongoing basis.

TOA 19-27 (Adapted)

For a cash flow hedge relating to the purchase of a particular asset, foreign exchange gains and losses made on the hedging instrument:

a. Are all passed to profit or loss.
b. Are passed to equity accounts up to the time of the underlying transaction, at which time they are then included as part of the cost of the asset. After this date, they are passed directly to profit or loss.
c. Are all passed to the cost of the asset.
d. Are passed directly to profit or loss up to the time of the expiration of the hedging instrument, at which time they are then included as part of the cost of the asset.

TOA 19-28 (Author)

Under IAS 39, unrealized holding gain or loss arising from changes in fair value of derivatives designated as fair value hedge shall be recognized in

a. Other comprehensive income with reclassification adjustment
b. Other comprehensive income without reclassification adjustment
c. Retained earnings
d. Profit or loss

TOA 19-29 (Author)

Under IAS 39, unrealized holding gain or loss arising from changes in fair value of derivatives designated as cash flow hedge pertaining to effective portion shall be recognized in

a. Other comprehensive income with reclassification adjustment
b. Other comprehensive income without reclassification adjustment
c. Retained earnings
d. Profit or loss

TOA 19-30 (Author)

Under IAS 39, unrealized holding gain or loss arising from changes in fair value of derivatives designated as cash flow hedge pertaining to effective portion if realized shall be reclassified in

a. Other comprehensive income
b. Share premium
c. Retained earnings
d. Profit or loss

TOA 19-31 (Author)

Under IAS 39, unrealized holding gain or loss arising from changes in fair value of derivatives designated as cash flow hedge pertaining to ineffective portion shall be recognized in

a. Other comprehensive income with reclassification adjustment
b. Other comprehensive income without reclassification adjustment
c. Retained earnings
d. Profit or loss

TOA 19-32 (Author)

Under IAS 39, unrealized holding gain or loss arising from changes in fair value of derivatives designated as hedge of net investment in foreign operation pertaining to effective portion shall be recognized in

a. Other comprehensive income with reclassification adjustment
b. Other comprehensive income without reclassification adjustment
c. Retained earnings
d. Profit or loss

TOA 19-33 (Author)

Under IAS 39, unrealized holding gain or loss arising from changes in fair value of derivatives designated as hedge of net investment in foreign operation pertaining to effective portion if realized shall be reclassified in

a. Other comprehensive income
b. Share premium
c. Retained earnings
d. Profit or loss

TOA 19-34 (Author)

Under IAS 39, unrealized holding gain or loss arising from changes in fair value of derivatives designated as hedge of net investment in foreign operation pertaining to ineffective portion shall be recognized in

a. Other comprehensive income with reclassification adjustment
b. Other comprehensive income without reclassification adjustment
c. Retained earnings
d. Profit or loss

TOA 19-35 (Adapted)

In terms of retrospectively assessing hedge effectiveness, which of the following situations does not meet the criteria for effectiveness?

a. Fair value of shares increased by P12,750; fair value of hedging instrument increased by P11,200.
b. Fair value of shares increased by P12,800; fair value of hedging

instrument decreased by P10,255.

c. Fair value of shares decreased by P12,316; fair value of hedging instrument increased by P15,325.
d. Fair value of shares decreased by P11,999; fair value of hedging instrument increased by P13,225.

TOA 19-36 (SME)

According to IFRS/PFRS for SMEs, Section 30, *Foreign Currency Translation,* an entity can conduct foreign activities in two ways. They are:

a. Reporting purchase price parity and reporting foreign interest rate adjustments.
b. Accounting for foreign currency debt and offshore financing.
c. Accounting for foreign currency transactions and translating the accounts of foreign operations.
d. Accounting for foreign currencies using the forex buy rate and the forex sell rate.

TOA 19-37 (SME)

Under IFRS/PFRS for SMEs, Section 30, *Foreign Currency Translation,* which of the following is not a factor an entity considers in determining its functional currency?

a. The currency that mainly influences sales prices for goods and services.
b. The currency of the country whose competitive forces and regulations mainly determine the sales prices of its goods and services.
c. The currency that mainly influences labor, material and other costs of providing goods and services.
d. The currency in which funds from financing activities are generated.

TOA 19-38 (SME)

IFRS/PFRS for SMEs, Section 30, *Foreign Currency Translation,* provides that a foreign currency transaction shall be recorded on initial recognition in the

a. Presentation currency
b. Local currency
c. Foreign currency
d. Functional currency

MULTIPLE CHOICE – Problems

PROB. 19-1 (RPCPA)

If one Taiwanese dollar can be exchanged for P1.025, the fraction for computing indirect quotation of exchange rate expressed in Taiwanese currency would be:

a. 0.975/1.00
b. 1.00/0.975
c. 1.00/1.025
d. 1.025/1.00

PROB. 19-2 (RPCPA)

Filcraft Corp. sold metal crafts to a US firm for $70,000 and pertinent information on exchange conversion rates related to this transaction were as follows:

		Conversion Rate (Peso to US$)
Nov. 4	Receipt of order	P27.40
Nov. 22	Date of shipment	27.50
Dec. 31	Balance sheet date	27.60
Jan. 6	Date of collection	27.00

The sale would be appropriately recorded at:

a. 1,890,000
b. 1,918,000
c. 1,925,000
d. 1,932,000

PROB. 19-3 (AICPA)

On September 1, 2019, Bain Corp. received an order for equipment from a foreign customer for 300,000 local currency units (LCU) when the peso equivalent was P96,000. Bain shipped the equipment on October 15, 2019, and billed the customer for 300,000 LCU when the peso equivalent was P100,000. Bain received the customer's remittance in full on November 16, 2019, and sold

the 300,000 LCU for P105,000. In its income statement for the year ended December 31, 2019, Bain should report a foreign exchange transaction gain of

a. 0
b. 4,000
c. 5,000
d. 9,000

PROB. 19-4 (AICPA)

On September 1, 2019, Cano & Co. sold merchandise to a foreign firm for 250,000 francs. Terms of the sale require payment in francs on February 1, 2020. On September 1, 2019, the spot exchange rate was P1.20 per franc. At December 31, 2019, Cano's year-end, the spot rate was P1.19, but the rate increased to P1.22 by February 1, 2020, when payment was received. How much should Cano report as foreign exchange transaction gain or loss in its 2020 income statement?

a. 0
b. 2,500 loss
c. 5,000 gain
d. 7,500 gain

PROB. 19-5 (AICPA)

Lindy Corp. bought inventory items from a foreign supplier in Japan on November 15, 2019 for 100,000 yen, when the spot rate was P0.4295. At Lindy's December 31, 2019, year end, the spot rate was P0.4245. On January 15, 2020, Lindy bought 100,000 yen at the spot rate of P0.4345 and paid the invoice. How much should Lindy report in its income statements for 2019 and 2020 as foreign exchange transaction gain or loss?

	2019	2020
a.	500	(1,000)
b.	0	(500)
c.	(500)	0
d.	(1,000)	500

PROB. 19-6 (AICPA)

On November 15, 2019, Celt, Inc., a Philippine company located in Baguio City, ordered merchandise FOB shipping point from a German company for 200,000 marks. The merchandise was shipped and invoiced to Celt on December 10, 2019. Celt paid the invoice on January 1, 2020. The spot rates for marks on the respective dates are as follows:

November 15, 2019	P 22.4955
December 10, 2019	22.4875
December 31, 2019	22.4675
January 10, 2020	22.4475

In Celt's December 31, 2019 income statement, the foreign exchange gain is

a. 9,600
b. 8,000
c. 4,000
d. 1,600

PROB. 19-7 (AICPA)

On April 8, 2019, Day Corp. purchased merchandise from an unaffiliated foreign company for 10,000 units of foreign company's local currency. Day paid the bill in full on March 1, 2020 when the spot rate was P0.45. The spot rate was P0.60 on April 8, 2019 and was P0.55 on December 31, 2019. For the year ended December 31, 2020, Day should report a transaction gain of

a. 1,500
b. 1,000
c. 500
d. 0

PROB. 19-8 (RPCPA)

Phil-Export Corp. sold to American customer merchandise worth US$10,000. As of Phil-Export's balance sheet cut-off date on June 30, 2019, the exchange rate was P26.60. On August 15, 2019, payment was received in the form of a bank transfer whereby Phil-Export's account was credited the amount of P265,400 before any charges. At the time of acceptance of the merchandise in San Francisco, the exchange rate was P26.75. The appropriate exchange rate for the recognition of the sale was:

a. 26.54
b. 26.60
c. 26.63
d. 26.75

PROB. 19-9 (RPCPA)

Local Corp. imported a heavy machine from the US for US$50,000 on October 10, 2019. A letter of credit was opened with a Makati branch based on the commercial invoice for US$50,000, on which Local Corp. made a 100% deposit cover based on the exchange rate of $1.00 to P27.50. Shipment of the heavy machine was effected on December 30, 2019, at which time the exporter collected the proceeds of the letter of credit when the prevailing exchange rate was $1.00 to P28.00. From the exchange rate fluctuation, Local Corp. realized:

a. No gain, no loss
b. A P5,000 gain
c. A P25,000 gain
d. A P25,000 loss

PROB. 19-10 (IAS)

The White Co. has the Philippine pesos as its functional currency. On October 16, 2019, White ordered some inventory from a foreign supplier and agreed a purchase price of 160,000 local currency units (LCU). The inventory was received on November 15, 2019. At December 31, 2019, the inventory remained on hand and the trade payable balance for the inventory purchase remained outstanding. The supplier was paid on January 27, 2020 and the inventory was sold on January 31, 2020. The following information about exchange rates is available:

October 16, 2019	P1.00 = 2.60 LCU
November 15, 2019	P1.00 = 2.50 LCU
December 31, 2019	P1.00 = 2.40 LCU
January 27, 2020	P1.00 = 2.25 LCU

According to IAS 21, The Effects of Changes in Foreign Exchange Rates, at what amount should the trade payable balance due to the supplier be presented in the statement of financial position at December 31, 2019?

a. 61,538

b. 64,000
c. 66,667
d. 71,111

PROB. 19-11 (RPCPA)

On June 15, 2020, Boni Co. purchased merchandise worth 100,000 Swiss francs from its supplier in Switzerland payable within 30 days under an open account arrangement. Boni issued a 30-day, 6% note payable in Swiss francs. On July 15, 2020, Boni paid the note in full. The following information in spot rates (P/SF) is provided:

	Buying	Selling
June 15, 2020	P 24.03	P 24.15
July 15, 2020	24.10	24.22

What is Boni's foreign exchange gain (loss) for the transaction?

a. (5,040)
b. 12,075
c. (7,035)
d. (19,110)

PROB. 19-12 (AICPA)

Ball Corp. had the following foreign currency transactions during 2019:

- Merchandise was purchased from a foreign supplier on January 20, 2019, for the Philippine peso equivalent of P90,000. The invoice was paid on March 20, 2019, at the Philippine peso equivalent of P96,000.

- On July 1, 2019, Ball borrowed the Philippine peso equivalent of P500,000 evidenced by a note that was payable in the lender's local currency on July 1, 2020. On December 31, 2019, the Philippine peso equivalents of the principal amount and accrued interest were P520,000 and P26,000, respectively. Interest on the note is 10% per annum.

In Ball's 2019 income statement, what amount should be included as foreign exchange transaction loss?

a. 0

b. 6.000
c. 21.000
d. 27.000

PROB. 19-13 (RPCPA)

Hizon Holdings. Inc. is a parent company of a group of companies, but also does its own trading. It bought a fixed assets for S36.000 on November 1, 2019 when the exchange rate was S1.00 = P23.00. At December 31, 2019, the company's year-end. the supplier of the fixed asset has not been paid and the exchange rate at that time was S1.00 = P25.00. The company has not taken out forward exchange contract for this payment as a hedge against adverse exchange rate movements. On the balance sheet of Hizon Holdings, Inc., what will be the values for the fixed asset and the creditor who was unpaid?

	Fixed asset	Creditor
a.	900,000	900,000
b.	900,000	828,000
c.	828,000	828,000
d.	828,000	900,000

PROB. 19-14 (AICPA)

Hunt Co. purchased merchandise for 300,000 francs from a vendor in Belgium on November 30, 2019. Payment in Belgium francs was due on January 30, 2020. The exchange rates to purchase one franc were as follows:

	Nov. 30, 2019	Dec. 31, 2019
Spot rate	P1.65	P1.62
30-day rate	1.64	1.59
60-day rate	1.63	1.56

In its December 31, 2019, income statement, what amount should Hunt report as foreign exchange gain?

a. 12,000
b. 9,000
c. 6,000
d. 0

PROB. 19-15 (AICPA)

On November 30, 2018, Tyrola Publishing Co., located in Manila, executed a contract with Ernest Blyton, an author from Canada, providing for payment of 10% royalties on Canadian sales of Blyton's book. Payment is to be made in Canadian dollars each January 10 for the previous year's sales. Canadian sales of the book for the year ended December 31, 2019 totaled $50,000 Canadian dollars. Tyrola paid Blyton his 2019 royalties on January 10, 2020. Tyrola's 2019 financial statements were issued on February 1, 2020. Spot rates for Canadian dollars were as follows:

November 30, 2018	P27.87
January 1, 2019	27.88
December 31, 2019	27.89
January 10, 2020	27.90

How much should Tyrola accrue for royalties payable at December 31, 2019?

a. 139,350
b. 139,400
c. 139,450
d. 139,500

PROB. 19-16 (Adapted)

On October 1, 2019, a local importer contracted to purchase foreign goods requiring payment of 100,000 German marks one month after their receipt at the local importer's business place. Title to the goods passed on the date of shipment on December 1, 2019. On December 31, 2019, the goods were still in transit. The following exchange rates were made available:

October 1, 2019	P 22.00
December 1, 2019	20.00
December 31, 2019	26.00

How should the exchange fluctuation in 2016 be accounted by this local importer?

Transaction gain (loss)	Translation adjustment

a.	(400,000)	0
b.	600,000	200,000
c.	(600,000)	200,000
d.	(600,000)	0

PROB. 19-17 (Author)

On November 1, 2020, an entity acquired on account goods from a foreign supplier at a cost of $1,000. The accounts payable are paid on January 30, 2021.

On December 1, 2020, an entity sold on account the said goods to a foreign customer at a selling price of $1,500. The accounts receivable are collected on February 28, 2021.

The entity is operating in Philippine economy wherein the functional currency is the Philippine Peso.

The following direct exchange rates are provided:

	11/1/2020	12/1/2020	12/31/2020	1/30/2021	2/28/2021
Buying spot rate	P40	P39	P45	P43	P42
Selling spot rate	P42	P40	P47	P46	P45

a. What is the sales revenue to be reported by the entity for the year ended December 31, 2020?
   a. 58,500
   b. 60,000
   c. 67,500
   d. 72,000

b. What is the cost of sales to be reported by the entity for the year ended December 31, 2020?
   a. 40,000
   b. 42,000

c. 45,000
d. 47,000

c. What is the book value of account receivable on December 31, 2020?
   a. 58,500
   b. 60,000
   c. 67,500
   d. 72,000

d. What is the book value of accounts payable on December 31, 2020?
   a. 40,000
   b. 42,000
   c. 45,000
   d. 47,000

e. What is the net foreign currency gain or (loss) for the year ended December 31, 2020?
   a. 4,000
   b. 5,000
   c. 3,000
   d. 6,000

PROB. 19-18 (AICPA)

Fay Corp. had a realized foreign exchange loss of P15,000 for the year ended December 31, 2019 and must also determine whether the following items will require year-end adjustment:

- Fay had P8,000 loss resulting from the translation of the accounts of its wholly owned foreign subsidiary for the year ended December 31, 2019.
- Fay had an account payable to an unrelated foreign supplier payable in the supplier's local currency. The Philippine peso equivalent of the payable was P64,000 on the October 31, 2019 invoice date, and it was P60,000 on December 31, 2019. The invoice is payable on January 30, 2020.

In Fay's 2019 consolidated income statement, what amount should be included as foreign exchange loss?

a. 11,000
b. 15,000
c. 19,000
d. 23,000

PROB. 19-19 (AICPA)

Certain balance sheet accounts of a foreign subsidiary of Rowan, Inc. at December 31, 2019, have been translated into Philippine pesos as follows:

	Translated at	
	Current rate	Historical rate
Note receivable, long-term	P240,000	P200,000
Prepaid rent	85,000	80,000
Patent	150,000	170,000
	P475,000	P450,000

What total amount should be included in Rowan's December 31, 2019, consolidated balance sheet for the above accounts using the translation method recognized under PAS 21?

a. 450,000
b. 455,000
c. 475,000
d. 495,000

PROB. 19-20 (Adapted)

A wholly owned subsidiary of Ward, Inc. has certain expense accounts for the year ended December 31, 2019 stated in local currency units (LCU's) as follows:

	LCU
Depreciation of equipment	120,000
Provision for doubtful accounts	80,000
Rent	200,000

The exchange rates at various dates are as follows:

	Peso equivalent

	of 1 LCU
December 31, 2019	P 0.40
Average for year ended December 31, 2019	0.44
January 1, 2013 (Date of organization)	0.50

Using the only one method of translating the financial statements of foreign operations recognized by PAS 21, what total peso amount should be included in Ward's 2019 consolidated income statement to reflect these expenses?

a. 160,000
b. 168,000
c. 176,000
d. 183,200

PROB. 19-21 (AICPA)

A wholly owned foreign subsidiary of Union Co. has certain expense accounts for the year ended December 31, 2019 stated in local currency units (LCU) as follows:

	LCU
Amortization of patent (related patent acquired on January 1, 2017)	40,000
Provision for doubtful accounts	60,000
Rent	100,000

The exchange rates at various dates are as follows:

	Peso equivalent of 1 LCU
December 31, 2019	P 0.20
Average for year ended December 31, 2019	0.22
January 1, 2017	0.25

Using the generally accepted method of translating the financial statements of foreign operation, what total peso amount should be included in Union's income statement to reflect the above expenses for the year ended December 31, 2019?

a. 40,000
b. 42,000
c. 44,000
d. 45,200

PROB. 19-22 (Adapted)

Manila Corp., a wholly-owned subsidiary of Asia, Inc. in California, USA, has certain expense accounts for the year ended December 31, 2019, stated in US dollars as follows:

	US dollars
Selling expenses	360,000
Salaries and wages	600,000
Depreciation expense	240,000

The exchange rates at various dates are as follows:

	Peso equivalent of 1 US dollar
December 31, 2019	P 40.00
Average for year ended 12/31/2019	35.00
January 1, 2019	25.00

Assume that the charges to the expense accounts occurred approximately evenly during the year. What total peso amount should be included in Asia's 2019 consolidated income statement to reflect these expenses?

a. 30,000,000
b. 39,000,000
c. 42,000,000
d. 48,000,000

PROB. 19-23 (IAS)

The Will Co. acquired a foreign subsidiary on August 15, 2019. Goodwill arising on the acquisition was P175,000. Consolidated financial statements are prepared at the year end of December 31, 2019 requiring the translation of all foreign operations' results into presentation currency of Philippine pesos.

The following rates of exchange have been identified:

August 15, 2019	1.321 LCU = P1.00
December 31, 2019	

Average rate: year ended December 31, 2019	1.302 LCU = P1.00
Average rate: from August 15 to December 31	1.292 LCU = P1.00

According to IAS 21, The Effects of Changes in Foreign Exchange Rates, at what amount should the goodwill be measured in the consolidated statement of financial position?

a. 134,409
b. 135,449
c. 134,823
d. 312,475

PROB. 19-24 (IAS)

On September 1, 2019, Neptune Co. acquires a foreign subsidiary. The fair value of the subsidiary's assets was the same as their carrying amount except for land where the fair value was P50,000 greater than carrying amount. This fair value adjustment has not been recognized in the separate financial statements of the subsidiary. Consolidated financial statements are prepared at the end of the year December 31, 2019 requiring the translation of all foreign operations' result into presentation currency of Philippine pesos. The following exchange rates have been determined:

September 1, 2019	P 1.62
December 31, 2019	1.56
Average rate for the year ended December 31, 2019	1.60
Average rate from September 1, 2019 to December 31, 2019	1.58

According to IAS 21, what fair value adjustment is required to the carrying amount of land in the consolidated balance sheet?

a. 30,864
b. 32,051
c. 31,250
d. 31,646

PROB. 19-25 (Author)

Entity A owns majority of the outstanding ordinary shares of Entity B which is operating in United States of America wherein the functional currency is the USA $. However, the presentation currency of Entity B is the Philippine Peso because that is the presentation currency of Entity A. For the year ended December 31, 2020, Entity B presented its Statement of Financial Position in its functional currency of USA $:

Current assets	$ 10,000	Current liabilities	$ 10,000
Noncurrent assets	40,000	Noncurrent liabilities	20,000
Total Assets	$ 50,000	Ordinary shares	5,000
		Preference share	8,000
		Retained earnings	7,000
		Total Liabilities & Equity	$ 50,000

The following additional data are provided:

- The ordinary shares are issued on January 1, 2019 while the preference shares are issued on July 1, 2020.
- B reported $1,000 net income during 2020 and distributed dividends in the amount of $200 on December 1, 2020.
- The translated retained earnings on December 31, 2019 is P300,000.

The following direct exchange rates are provided:

January 1, 2019	July 1, 2019	Dec. 31, 2019	Dec. 1, 2019	Dec. 31, 2020	2020 Average
P40	P42	P43	P41	P45	P44

a. What translation gain or loss to be presented in the other comprehensive income of statement of comprehensive income for the year ended December 31, 2020?
   a. 38,600
   b. 39,200
   c. 40,400
   d. 41,800

b. What is the cumulative translation credit or (debit) to be presented in the other comprehensive income of statement of financial position as of December 31, 2020?

a. 25,400
b. 28,200
c. 26,800
d. 24,600

c. What is the cumulative translation credit or (debit) to be presented in the other comprehensive income of statement of financial position as of December 31, 2020?
   a. (11,000)
   b. (13,600)
   c. (10,400)
   d. (17,200)

PROB. 19-26 (Adapted)

Paris Co., a wholly-owned subsidiary of Filipino Corp. is located in France. In 2019, Filipino Corp. borrowed French francs as a partial hedge of its investment in Paris Co. On December 31, 2019, in the preparation of consolidated financial statements, Filipino Corp.'s translation loss on its investment in the subsidiary amounted to P500,000, while its exchange gain on the borrowing amounted to P300,000. What amount of gain or loss should Filipino Corp. report in consolidated income statement and balance sheet?

	Income statement	Balance sheet
a.	(500,000)	300,000
b.	300,000	(500,000)
c.	0	(200,000)
d.	(200,000)	0

PROB. 19-27 (Author)

On December 1, 2020, Entity A imported goods at a price of $1,000 payable on March 1, 2021. In order to hedge this foreign currency denominated importation, Entity A entered into a forward contract with a bank to purchase $1,000. Entity A is operating in Philippine economy where the functional currency is Philippine peso.

The following direct exchange rates are given:

	December 1, 2020	December 31, 2020	March 1, 2021
Buying spot	P43	P40	P41
Selling spot	P45	P44	P49
90-day forward buying	P41	P43	P44
90-day forward selling	P42	P41	P43
60-day forward buying	P45	P42	P41
60-day forward selling	P46	P45	P40
30-day forward buying	P47	P46	P42
30-day forward selling	P48	P47	P43

a. What is the foreign currency gain or (loss) on the hedged item for the year ended December 31, 2020?
   a. (2,000)
   b. 1,000
   c. 3,000
   d. 4,000

b. What is the foreign currency gain or (loss) on the hedging instrument for the year ended December 31, 2021?
   a. 4,000
   b. (2,000)
   c. (1,000)
   d. 3,000

PROB. 19-28 (Author)

On November 1, 2020, Entity A entered into a firm commitment for the exportation of goods at a price of $2,000. Delivery will happen on January 31, 2020. In order to hedge this foreign currency denominated firm commitment, Entity A entered into a forward contract with a bank to sell $2,000. Entity A is operating in Philippine economy where the functional currency is Philippine

peso. Entity A elects to use fair value hedge to account this hedge of firm commitment.

The following direct exchange rates are given:

	November 1, 2020	December 31, 2020	January 30, 2021
Buying spot	P43	P40	P44
Selling spot	P45	P44	P49
90-day forward buying	P41	P43	P44
90-day forward selling	P42	P41	P43
60-day forward buying	P45	P42	P41
60-day forward selling	P46	P45	P40
30-day forward buying	P47	P46	P42
30-day forward selling	P48	P44	P43

a. What is the book value of firm commitment asset or liability on December 31, 2020?
   a. 4,000 liability
   b. 10,000 liability
   c. 2,000 liability
   d. 6,000 liability

b. What is the foreign currency gain or (loss) on hedging instrument for the year ended December 31, 2021?
   a. 4,000
   b. (2,000)
   c. (6,000)
   d. 8,000

PROB. 19-29 (Author)

On November 1, 2020, Entity anticipated the purchase of equipment on January 31, 2021 at a price of $1,200. In order to hedge this highly probable forecasted importation, Entity A entered into a forward contract with a bank to purchase $1,200. Entity A is operating in Philippine economy where the functional

currency is Philippine peso. The equipment has a useful life of 4 years. The following direct exchange rates are given:

	November 1, 2020	December 31, 2020	January 31, 2021
Buying spot	P43	P40	P41
Selling spot	P45	P44	P43
90-day forward buying	P40	P43	P44
90-day forward selling	P42	P41	P43
60-day forward buying	P45	P42	P41
60-day forward selling	P46	P45	P40
30-day forward buying	P47	P43	P42
30-day forward selling	P48	P44	P40

a. What is the unrealized holding gain or (loss) to be recognized in the other comprehensive income of statement of comprehensive income for the year ended December 31, 2020?
   a. 2,400
   b. 1,200
   c. (3,600)
   d. 4,800

b. What is the unrealized holding gain or (loss) to be recognized in the other comprehensive income of statement of comprehensive income for the year ended December 31, 2021?
   a. (4,800)
   b. (1,200)
   c. 3,600
   d. 2,400

c. What is the cumulative credit or (debit) in the other comprehensive income of Statement of Financial Position as of December 31, 2021?
   a. 1,200
   b. (1,800)
   c. 925
   d. 900

d. What is the cost of equipment on January 31, 2021?
   a. 48,000
   b. 50,400
   c. 49,200
   d. 51,600

PROB. 19-30 (Author)

On November 1, 2020, Entity A anticipated the purchase of inventory on January 31, 2021 at a price of $1,000. In order to hedge this highly probable forecasted importation, Entity A acquired a call option from a bank giving it the right to purchase $1,000 at an option price of P40 by paying an option premium of P300. Entity A is operating in Philippine economy where the functional currency is Philippine peso.

The following data are provided:

	Nov. 1, 2020	Dec. 31, 2020	Jan 31, 2021
Buying spot rate	P38	P39	P42
Selling spot rate	P40	P44	P43
Fair value of call option	?	P4,500	?

Entity A imported the goods on the date anticipated. Afterwards, Entity A was able to resell 30% of the goods imported during 2021.

a. What is the unrealized holding gain or (loss) to be recognized in the other comprehensive income of statement of comprehensive income for the year ended December 31, 2020?
   a. 4,000
   b. 4,500
   c. 4,300
   d. 4,200

b. What is the unrealized holding gain or (loss) to be recognized in the profit or loss of comprehensive income for the year ended December 31, 2020?
   a. 300
   b. 200
   c. 500
   d. 100

c. What is the unrealized holding gain or (loss) to be recognized in the other comprehensive income of statement of comprehensive income for the year ended December 31, 2021?
   a. (3,000)
   b. (2;000)
   c. (1,000)
   d. (4,000)

d. What is the cumulative credit or (debit) in the other comprehensive income of Statement of Financial Position as of December 31, 2021?
   a. 4,000
   b. 3,000
   c. 1,000
   d. 2,100

e. What is the net effect on profit or loss to be recognized by the entity in the statement of comprehensive income for the year ended December 31, 2021?
   a. (500)
   b. 900
   c. 300
   d. 400

ANSWERS – Theory of Accounts

TOA 19-1 *Suggested answer (d) The spot rate at the date of transaction*

IAS 21, paragraph 21 provides that a foreign currency transaction shall be recorded, on initial recognition in the functional currency, by applying to the foreign currency amount the spot exchange rate between the functional currency and the foreign currency at the date of the transaction.

TOA 19-2 *Suggested answer (c) Translated at the spot rate at reporting date.*

IAS 21, paragraph 23(a) provides that at the end of each reporting period foreign currency monetary items shall be translated using the closing rate, which is the spot rate at reporting date.

TOA 19-3 *Suggested answer (b) Functional currency*

IAS 21 defines functional currency as the currency of the primary economic environment in which the entity operates and the primary economic environment is normally the one in which it primarily generates and expends cash.

TOA 19-4 *Suggested answer: (b) Presentation currency*

TOA 19-5 *Suggested answer: (a) Foreign currency*

TOA19-6 *Suggested answer: (c) Historical rate for both monetary items and nonmonetary items*

TOA 19-7 *Suggested answer: (b) Closing rate*

TOA 19-8 *Suggested answer: (a) Historical rate*

TOA 19-9 *Suggested answer: (a) Income tax payable*

TOA 19-10 *Suggested answer: (c) Sales*

TOA 19-11 *Suggested answer: (d) Profit or loss*

TOA 19-12 *Suggested answer: (b) Closing rate*

TOA 19-13 *Suggested answer: (a) Historical rate*

TOA 19-14 *Suggested answer: (d) It shall not be translated*

TOA 19-15 *Suggested answer: (a) Historical rate*

TOA 19-16 *Suggested answer: (a) Other comprehensive income . with reclassification adjustment*

TOA 19-17 *Suggested answer: (d) Profit or loss*

TOA 19-18 *Suggested answer (b) Been denominated in Philippine pesos.*

A foreign currency transaction gives rise to a receivable or a payable, fixed in terms of the amount of foreign currency. A change in exchange rate between the functional currency and the currency in which the transaction is denominated if a gain or loss that ordinarily should be included as a component of income from continuing operations in the period in which the exchange rate changes. However, changes in exchange rates do not affect transaction that are both denominated and measured in the reporting entity's currency. Thus no foreign currency transaction gain or loss occurred.

TOA 19-19 *Suggested answer (b) An ordinary gain included in net income*

Receivables or payables denominated in foreign currency should be adjusted to its current exchange rate at each balance sheet date. "Denominated in a foreign currency" means that the contract is settled in that currency. The transaction gain or loss arising from this adjustment should ordinarily be reflected in current income. Because the title passed on December 15, the liability fixed in LCUs should have been recorded on that date at LCU exchange rate. The increase in LCU per peso at year-end decreases the peso value of the liability and results in a foreign currency transaction gain. Such gain is ordinarily treated as a component of income from continuing operations.

TOA 19-20 *Suggested answer (b) Closing rate*

Closing rate is the spot exchange rate at the balance sheet date. This is sometime referred to as current rate.

TOA 19-21 *Suggested answer (d) Of the environment in which the subsidiary primarily generates and expends cash.*

Functional currency translation approach is the method used to convert foreign currency into units of the reporting currency. It is appropriate for use in accounting for and reporting the financial results and relationships of foreign subsidiaries in consolidated statements. This method identifies the functional currency of the entity (the currency of the primary economic environment in which the foreign entity operates), measures all elements of the financial statements in the functional currency, and uses a current exchange rate for translation from the functional currency to the reporting currency.

TOA 19-22 *Suggested answer (b) Yes, Yes*

When an entity's local currency is the functional currency and this currency has not experienced significant inflation, translation into the reporting currency of all elements of the financial statements must be at a current rate. Assets and liabilities are translated at the exchange rate at the balance sheet rate. Revenue and expenses should be translated at the rates in effect when they were recognized. However, translation of income statement items at a weighted average rate for the period is permitted.

TOA 19-23 *Suggested answer (c) True False*

IAS 21, par 28, provides that exchange difference arising on the settlement of monetary items or on translating monetary items at rates different from those at which they were translated on initial recognition during the period or in previous financial statements shall be recognized in profit or loss in the period in which they arise, except exchange differences arising on a monetary item that forms part of a reporting entity's net investment in a foreign operation, which shall be recognized in profit or loss in the separate financial statements of the reporting entity or the individual financial statements of the foreign operation, as appropriate.

TOA 19-24 *Suggested answer (c) True False*

IAS 2, par 28 provides that Exchange differences arising on the ***settlement of monetary items*** *or on* ***translating monetary items*** *at rates different from those at which they were translated on initial recognition during the period or in previous financial statements shall be recognized in profit or loss in the period in which they arise, except exchange differences arising on monetary items that forms part of a reporting entity's net investment in a foreign operation, which shall be recognized in the profit or loss in the separate financial statements of the reporting entity or the individual financial statements of the foreign operation, as appropriate. Thus the exchange difference on the translation of a monetary item, as presented in statement II, shall not be recognized in other comprehensive income, instead in profit or loss.*

TOA 10-25 *Suggested answer (c) Perfectly hedged*

This is the characteristic of perfectly hedged, otherwise, it is partially hedged.

TOA 19-26 *Suggested answer (b)The forecast transaction does not affect profit or loss.*

One of the conditions for applying hedge accounting is for cash flow hedge, a forecast transaction that is the subject of the hedge must be highly probable and must present an exposure to variations in cash flows that could ***ultimately affect profit or loss.***

TOA 19-27 *Suggested answer (b)*

In a cash flow hedge, the gain or loss on measuring the hedged item at fair value is treated as part of the periods profit or loss. ***While the gain or loss on hedging instrument is initially transferred to equity and included in other comprehensive income, but subsequently transferred to profit or loss as necessary to offset the gains or losses recorded on the hedged item.*** *At the conclusion of the hedging instrument, any remaining amount in equity relating to hedging instrument is to be transferred to profit or loss.*

TOA 19-28 *Suggested answer: (d) Profit or loss*

TOA 19-29 *Suggested answer: (a) Other comprehensive income with reclassification*

Adjustment

TOA 19-30 *Suggested answer: (d) Profit or loss*

TOA 19-31 *Suggested answer: (d) Profit or loss*

TOA 19-32 *Suggested answer: (a) Other comprehensive income with reclassification*

Adjustment

TOA 19-33 *Suggested answer: (d) Profit or loss*

TOA 19-34 *Suggested answer: (d) Profit or loss*

TOA 19-35 *Suggested answer (a) Fair value of shares increased by P12,750; fair value of hedging instrument increased by P11,200.*

IAS 39, paragraph AG105 states that (a) at the inception of the hedge and in subsequent periods, the hedge is expected to be highly effective in achieving offsetting changes in fair value or cash flows attributable to the

IFRS/PFRS for SMEs, Section 30, Foreign Currency Translation, provides that an entity can conduct foreign activities in two ways: 1.) transactions in foreign currencies; and 2.) foreign operations.

TOA 19-37 *Suggested answer (c)*

The currency that mainly influences labor, material and other costs of providing goods and services is applicable to full IFRS/PFRS; and ***not to SMEs.***

TOA 19-38 *Suggested answer (d) Functional currency*

Paragraph 30.7, Section 30, Foreign Currency Translation, provides that an entity shall record a foreign currency transaction, ***on initial recognition in the functional currency,*** *by applying to the foreign currency amount the spot exchange rate between the functional currency and the foreign currency at the date of the transaction.*

SOLUTIONS - Problems

PROB. 19-1 *Suggested answer* (c) P1.00/1.025

Rates of exchange between foreign and domestic currencies may be quoted directly or indirectly. A direct quotation states the value of a single unit of foreign currency in terms of equivalent domestic currency. While an indirect quotation, states the domestic currency unit in terms of equivalent foreign currency.

Therefore, the fraction for computing indirect quotation of exchange rate expressed in foreign currency should be 1.00/1.025. Note the following relationship between a direct and indirect quotation: Direct quotation = 1/indirect quotation.

PROB. 19-2 *Suggested answer* (c) P1,925,000

When terms of sale are FOB shipping point, title passes to the buyer with the loading of goods at the point of shipment. Under these terms, application of the legal rule to a year-end shipment calls for recognition of a sale. When terms of sale are FOB destination, application of the legal test calls for no recognition of the transaction until goods are received by the buyer.

In practice, during an accounting period, purchases are normally recorded when goods are received and sales are recorded when goods are shipped. IAS 21 provides that except when a forward exchange contract is entered into, a transaction in a foreign currency should be recorded in the reporting currency of an entity by applying to the foreign currency amount the exchange rate existing at the time of the transaction or a rate that approximates the actual rate. Thus, the sale would be appropriately recorded at P1,925,000 ($70,000 x P27.50).

PROB. 19-3 *Suggested answer* (c) P5,000

Peso equivalent, October 15, 2019	P100,000
Peso equivalent, November 16, 2019	105,000
Foreign exchange transaction gain	P 5,000

IAS 21, Accounting for the Effects of Changes in Foreign Exchange Rates, provides that when a reporting entity may have transactions in foreign currencies, the transaction in a foreign currency is recorded in the financial records of an entity as of the date on which the transaction occurs, normally using the exchange rate at that date. When there is a change in the exchange rate between the transaction date and the settlement date arising from the transaction, an exchange difference will result. And when the transaction is settled within the same accounting period as that in which it occurred, the exchange difference between the amount originally recorded and the settlement amount is a ***gain or loss*** *except net investment hedged by foreign loans, which is to be treated in a manner similar with cash flow hedge.*

The peso equivalent of P100,000 on the date of shipment was used, instead of the peso equivalent of P96,000, because the sale of LCU was made on November 16, 2019. Thus, the difference between the original amount of P100,000 and the settlement amount of P105,000 at P5,000 was treated as ***foreign exchange transaction gain.***

PROB. 19-4 *Suggested answer* (d) 7,500 gain

Peso equivalent, December 31, 2019 (250,000 x 1.19)	P 297,500
Peso equivalent, February 1, 2020 (250,000 x 1.22)	305,000
Foreign exchange transaction gain in 2020 income statement	P 7,500

When the transaction is not settled in the same accounting period as that in which it occurred, the gain or loss must be recognized at any intervening balance sheet dates, if necessary. Thus, the exchange difference between that of the date of sale and the balance sheet date would be recognized in 2019 income statement; while the exchange difference between the balance sheet date and the settlement date would be recognized in 2020 income statement.

PROB. 19-5 *Suggested answer* (a) P500 P(1,000)

Peso equivalent, November 5, 2019 (100,000 x 0.4295)	P42,950
Peso equivalent, December 31, 2019 (100,000 x 0.4245)	42,450
Forex transaction gain, 2019	P 500

Peso equivalent, December 31, 2019 (100,000 x 0.4245)	P42,450

Peso equivalent, January 15, 2020 (100,000 x 0.4345)	43,450
Forex transaction loss, 2020	(P1,000)

Again, when the transaction is not settled in the same accounting period as that in which it occurred, the gain or loss must be recognized at any intervening balance sheet dates, if necessary. Since Lindy's functional currency is the Philippine peso, a foreign exchange transaction gain or loss will result if the spot rate on the settlement date is different from the rate on the transaction date. Thus in 2019, a P500 foreign exchange transaction gain would be recognized, and in 2020, a P1,000 foreign exchange transaction loss would be recognized, as shown above.

PROB. 19-6 *Suggested answer* (c) P4,000

Peso equivalent, date of shipment (200,000 x P22.4875)	P4,497,500
Peso equivalent, balance sheet date (200,000 x P22.4675)	4,493,500
Foreign exchange gain, 12/31/2019	P 4,000

Again, at an intervening balance sheet date, the foreign exchange transaction gain or loss should be the difference between the foreign exchange rate at the date purchase/sale was recorded and the exchange rate at the balance sheet date.

PROB. 19-7 *Suggested answer* (b) P1,000

Peso equivalent, 12/31/2019 (10,000 x P0.55)	P5,500
Peso equivalent, 3/1/2020 (10,000 x P0.45)	4,500
Foreign exchange transaction gain, 2020	P1,000

The requirement is to determine the foreign exchange transaction gain that should be reported for the year ended December 31, 2020, therefore, the transaction gain should be the difference between the peso equivalents using the foreign exchange rates at December 31, 2019 and March 1, 2020 (date of payment).

PROB. 19-8 *Suggested answer* (d) 26.75

Based on the information provided, the only determinable date of recognizing sale is when the merchandise was received by the foreign customer, which is in accordance with the principle of FOB destination. Thus, the appropriate exchange rate for the recognition of sale should be P26.75, the exchange rate at the date of acceptance.

PROB. 19-9 *Suggested answer* (a) No gain, No loss

Generally, losses from exchange rate changes, on the part of the buyer, may be avoided by the following: 1.) to have the transaction denominated in the local currency of the buyer; 2.) to pay the purchase immediately; and 3.) hedging. Hedging, normally, involves making a contract with a foreign currency broker to buy or sell foreign currency in the future. For a fee, a foreign currency broker assumes all the risk associated with exchange rate changes. Based on the foregoing information provided in the problem, where a letter of credit was opened and a 100% deposit cover was made, the bank assumes all the risk associated with exchange rate changes; therefore, no gain or loss from the exchange rate changes will be recognized.

PROB. 19-10 *Suggested answer (c) 66,667*

IAS 21, par 23 provides that at each balance sheet date, foreign currency monetary items shall be translated using the closing rate; non-monetary items that are measured in terms of historical cost in a foreign currency shall be translated using the exchange rate at the date of the transaction; and non-monetary items that are measured at fair value in a foreign currency shall be translated using the exchange rates at the date when the fair value was determined. Thus, trade payable balances should be presented in the statement of financial position at P66,667 (160,000/2.40).

PROB. 19-11 *Suggested answer (c) (7,035)*

Accounts payable:		
Principal (100,000 x 24.15)	2,415,000	
Interest (2,415,000 x 6% x 30/360)	12,075	2,427,075
Less payment:		

Principal (100,000 x 24.22)	2,422,000	
Interest (2,422,000 x 6% x 30/360)	12,110	2,434,110
Forex loss		(7,035)

Buying rate is the foreign exchange rate the bank will pay to its customers who would like to exchange their foreign currency into Philippine pesos; while selling rate is the foreign exchange rate the bank will sell its foreign currency.

PROB. 19-12 *Suggested answer* (d) P27,000

Peso equivalent of purchases, 1/20/2019	90,000	
Peso equivalent of amount paid	96,000	(P 6,000)
Peso equivalent of the note, 7/1/2019	500,000	
Peso equivalent of the note, 12/31/2019	520,000	(20,000)
Peso equivalent of the interest, 7/1/2019 (500,000 x 10% x 6/12)	25,000	
Peso equivalent of the interest, 12/31/2019	26,000	(1,000)
Total foreign exchange transaction loss		(27,000)

Again, when the transaction is not settled in the same accounting period as that in which it occurred, the gain or loss must be recognized at any intervening balance sheet dates, if necessary.

PROB. 19-13 *Suggested answer* (d) P828,000 P900,000

Fixed asset ($36,000 x P23.00)	P 828,000
Creditor ($36,000 x P25.00)	P 900,000

Except when a forward exchange contract is entered into, a transaction in a foreign currency should be recorded in the reporting currency of an entity by applying to the foreign currency amount the exchange rate existing at the time of the transaction or a rate that approximates the actual rate. And likewise with same exception, at each balance sheet date, foreign currency monetary items that result from transactions of the entity should be reported at the closing rate.

PROB. 19-14 *Suggested answer* (b) P9,000

Peso equivalent, Nov. 30. 2019 (300,000 x P1.65)	P495,000
Peso equivalent, Dec. 31, 2019 (300,000 x P1.62)	486,000
Foreign exchange gain, 12/31/2019	P 9,000

When the transaction is not settled in the same accounting period as that in which it occurred, the gain or loss must be recognized at any intervening balance sheet dates, if necessary Thus, the exchange rate difference between the date of purchase and the balance sheet date would be recognized in 2019 income statement. The 30-day and 60-day rates would affect the buyer only if the company had entered into forward contracts.

PROB. 19-15 *Suggested answer* (c) P139,450

Accrued royalty payable, 12/31/2019 (50,000 x 10% x P27.89)	P139,450

When a foreign currency transaction in which settlement is denominated in other than a company's functional currency, foreign currency transaction gain or loss may be recognized which is the difference between the amount accrued and the amount paid. However, the requirement is to determine the amount which the company should accrue for royalties payable, therefore the year-end accrual would be P139,450, as shown above.

PROB. 19-16 *Suggested answer* (d) P(600,000) P 0

Peso equivalent, December 1, 2019 (100,000 x P20.00)	P2,000,000
Peso equivalent, December 31, 2019 (100,000 x P26.00)	2,600,000
Foreign exchange transaction loss	(P 600,000)

Foreign currency transactions are transactions whose terms are denominated in a currency other than the entity's functional currency. Foreign currency transaction arises when an enterprise 1.) buys or sells on credit goods or services whose prices are denominated in foreign currency; 2.) borrows or lends funds and the amounts payable or receivable are denominated in foreign currency; 3.) is a party to an unperformed forward

exchange contract; or 4.) for other reasons, acquires or disposes of assets, or incurs or settles liabilities denominated in foreign currency.

Transaction gains or losses result from a change in exchange rates between the functional currency and the currency in which a foreign currency transaction is denominated. While, translation adjustments result from the process of translating financial statements from the entity's functional currency into the reporting currency.

PROB. 19-17

a. *Suggested answer: (a) 58,500*

Sales revenue at transaction rate (1,500 x 39)	58,500

Note: Nonmonetary item such as sales shall be translated at transaction rate.

b. *Suggested answer: (b) 42,000*

Cost of sales at transaction rate (1,000 x 42)	42,000

Note: Nonmonetary item such as cost of sales shall be translated at transaction rate.

c. *Sugegsted answer: (c) 67,500*

Book value of accounts receivable at closing rate (1,500 x 45)	67,500

Note: Monetary item such as accounts receivable shall be translated at closing rate.

d. *Sugegsted answer: (d) 47,000*

Book value of accounts payable at closing rate (1,000 x 47)	47,000

Note: Monetary item such as accounts payable shall be translated at closing rate.

e. *Sugegsted answer: (a) 4,000*

Foreign currency gain on accounts receivable during 2020 [1,500 x (39-45)]	9,000
Less Foreign currency loss on accounts payable during 2020 [1,000 x (42-47)]	5,000
Net foreign currency gain during 2020	4,000

PROB. 19-18 *Suggested answer* (a) P11,000

Unadjusted foreign exchange loss	P 15,000
Less foreign exchange gain from unrelated foreign supplier (P64,000 - 60,000)	4,000
Consolidated foreign exchange loss	P 11,000

PAS 21 recognized only one translation method for foreign operations. Under this method, assets and liabilities are translated at the closing rate, and income and expenses are translated at the exchange rate at the dates of the transaction (or at the average rate for the period when it is a reasonable approximation). Any exchange differences arising from the translation is recognized in stockholders' equity as foreign currency translation adjustment.

A foreign currency transaction is a transaction that is denominated or requires settlement in a foreign currency, which includes, among others, importation and exportation. PAS 21 provides that foreign exchange gains or losses arising from foreign currency transaction are included in the measurement of net income for the accounting period in which the exchange rate changes.

Therefore, the loss resulting from the translation of the accounts of its wholly owned foreign subsidiary should be reported in the stockholders' equity section of the balance sheet; while the foreign exchange loss arising from foreign currency transaction shall be recognized in income statement.

PROB. 19-19 *Suggested answer* (c) P475,000

Again, under the only one translation method recognized by PAS 21, assets and liabilities are translated at the closing rate, and income and expenses are translated at the exchange rates at the dates of the transactions or at the average rate for the period when this is a reasonable approximation. Therefore, all assets shall be translated at closing rate (current rate).

PROB. 19-20 *Suggested answer (c) P176,000*

Depreciation (120,000 x 0.44)	P 52,800
Provision for doubtful accounts (80,000 x 0.44)	35,200
Rent (200,000 x 0.44)	88,000
Total translated expenses	P176,000

One of the main changes provided by PAS 21 is the recognition of only one method in translating the financial statement of foreign operations. Under this method, assets and liabilities are translated at the closing rate, and income and expenses are translated at the exchange rates at the dates of the transactions or at the average rate for the period when this is a reasonable approximation.

PROB. 19-21 *Suggested answer (d) P45,200*

Patent amortization (40,000 x P0.25)	P 10,000
Provision for doubtful accounts (60,000 x 0.22)	13,200
Rent (100,000 x 0.22)	22,000
Total remeasured expenses	P 45,200

Again, under the only one translation method recognized by PAS 21, assets and liabilities are translated at the closing rate, and income and expenses

are translated at the exchange rates at the dates of the transactions or at the average rate for the period when this is a reasonable approximation. Since the standard provides that the dates of the transaction shall be used to translate income and expenses, the author deemed it proper to adapt the position of IAS 21that is, depreciation/amortization should be translated using the exchange rate at the date of purchase of the asset, unless the asset is carried at fair value, in which case the rate that existed on the date of such revaluation is to be used.

Thus, the exchange rate when the patent was acquired was used to translate the amortization of the patent. Furthermore, in some cases where the acquisition date of depreciable asset is not known, the author deemed it proper that the average rate shall be used.

PROB. 19-22 *Suggested answer* (c) P42,000,000

Selling expenses (360,000 x 35)	P12,600,000
Salaries and Wages (600,000 x 35)	21,000,000
Depreciation (240,000 x 35)	8,400,000
Consolidated expenses	P42,000,000

In accordance with the only one translation method recognized by PAS 21, coupled with the information provided, that is, the charges to the expense accounts occurred approximately evenly during the year, all expenses/charges mentioned in the problem shall be translated at average rate.

PROB. 19-23 *Suggested answer (c) 134,823*

IAS 21, paragraph IN15, requires that goodwill and fair value adjustments to assets and liabilities that arise on the acquisition of a foreign entity to be treated as part of the assets and liabilities of the acquired entity and translated at the closing rate.

In addition, IAS 21, par 47, provides that any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition of that foreign operation shall be treated as assets and liabilities of the foreign

operation. And they shall be expressed in the functional currency of the foreign operation and shall be translated at the closing rate.

Thus, the goodwill shall measured in the consolidated statement of financial position at P134,823 (175,000/1.298.

PROB. 19-24 *Suggested answer (b) 32,051*

IAS 21, par 47 requires fair value adjustments to the carrying amounts of assets and liabilities arising from the acquisition of a foreign operation to be treated as assets and liabilities of the foreign operation. Therefore, they are translated at the closing rate of exchange in the amount of P32,051 (50,000/1.56).

PROB. 19-25

a. *Suggested answer: (a) (38,600)*

Net assets at December 31, 2019 rate (19,200 x 43)	825,600
Net income during 2020 at average rate (1,000 x 44)	44,000
Dividends declared during 2020 @transaction rate (200 x 41)	(8,200)
Net assets at December 31, 2020 at rolled amount	861,400
Less net asset at December 31, 2020 at December 31, 2020 rate ($20,000 x 45)	900,000
Translation gain during 2020 in other comprehensive income	38,600

b. *Suggested answer: (b) 28,200*

Total assets at closing rate on December 31, 2019 ($50,000 x 45)	P2,250,000
Retained earnings, December 31, 2019 @ translated amount	P300,000
Net income during 2020 @ average rate (1,000 x 44)	44,000
Dividends declared during 2020 @ transaction rate (200 x 41)	(8,200)
Retained earnings, December 31, 2020 @ translated amount	P335,800
Total liabilities at closing rate ($30,000 x 45)	P1,350,000

Ordinary shares @ transaction rate ($5,000 x 40)	200,000
Preference share @ transaction rate ($8,000 x 42)	336,000
Retained earnings, December 31, 2020 @ translated amount	335,800
Cumulative translation credit. December 31, 2020	**28,200**
Total Liabilities and SHE, December 31, 2020 (Total Assets @ closing rate, December 31, 2020)	P2,250,000

c. *Suggested answer: (c) (10,400)*

Cumulative translation credit, December 31, 2020	P 28,200
Less translation gain during 2020	38,600
Cumulative translation debit, December 31, 2019	P 10,400

PROB. 19-26 *Suggested answer* (c) P 0, P(200,000)

Translation loss on investment	(P500,000)
Exchange gain on borrowing	300,000
Net translation loss	(P200,000)

IAS 39 states that the portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is to be recognized directly in equity; whereas, the ineffective portion of the hedge is to be recognized immediately in results of operations if the hedging instrument is a derivative instrument, or else reported in equity if the instrument is not a derivative. Thus, the net translation loss of P200,000 should be presented in the stockholders' equity section of balance sheet.

Furthermore, IAS 21 provides that in the preparation of the consolidated financial statements, any exchange difference arising from the net investment in a foreign operation should be reported in other comprehensive income and not in the consolidated profit or loss. If the foreign entity is subsequently sold, any such exchange differences will form part of the reported profit or loss on disposal by reclassifying the amount from equity to profit or loss.

PROB. 19-27

a. *Suggested answer: (b) 1,000*

Foreign currency gain on accounts payable on 2020 [$1,000 x (45-44)]	1,000

b. *Suggested answer: (a) 4,000*

Foreign currency gain on forward contract receivable on 2021 [$1,000 x (45-49)]	4,000

PROB. 19-28

a. *Suggested answer (b) 10,000 liability*

Book value of firm commitment liability [$2,000 x (41-46)]	10,000

b. *Suggested answer (a) 4,000*

Foreign currency gain on forward contract payable [$2,000 x (46-44)]	4,000

PROB. 19-29

a. *Suggested answer (a) 2,400*

Gain on other comprehensive income, 2020 [$1,200 x (42-44)]	2,400

b. *Suggested answer (b) (1,200)*

Loss on other comprehensive income, 2021 [$1,200 x (44-43)]	1,200

c. *Suggested answer (c) 925*

Gain on other comprehensive income, 2020 (a)

Loss on other comprehensive income, 2021 (b)	(1,200)
Cumulative credit on other comprehensive income, 12/31/2021	1,200
Less reclassification to profit or loss ($1,200/4 x 11/12)	275
Cumulative credit on other comprehensive income, 12/31/2021 after reclassification	925

d. Suggested answer (d) (51,600)

Cost of equipment ($1,200 x 43)	51,600

PROB. 19-30

a. Suggested answer (a) 4,000

Gain on other comprehensive income for 2020 [$1,000 x (40-44)]	4,000

b. Suggested answer (b) 200

Gain on profit or loss of comprehensive income (P500 – 300)	200

c. Suggested answer (c) (1,000)

Loss on other comprehensive income for 2020 [$1,000 x (44-43)]	1,000

d. Suggested answer (d) 2,100

Gain on other comprehensive income for 2020 [$1,000 x (40-44)]	4,000
Loss on other comprehensive income for 2021 [$1,000 x (44-43)]	(1,000)
Cumulative translation credit, 12/31/2021	3,000
Reclassification to profit or loss ($3,000 x 30%)	(900)
Cumulative translation credit, 12/31/2021 after reclassification	2,100

e. *Suggested answer (d) 400*

Loss on profit or loss for the year 2021 (P500 – 0)	P (500)
Reclassification gain to profit or loss from OCI	900
Net effect in profit or loss for the year 2021	400

Chapter 20

ACCOUNTING FOR NOT-FOR-PROFIT ORGANIZATIONS

Introduction

Not for Profit Organizations (NFPO) are those that do not earn profits for its owners. Their operations are financed by contributions or donations. Some not for profit entities are classified as governmental because they are controlled by a government; however, most not for profit entities are non-governmental.

For many years, the need for greater accountability to funding sources and donors, "fund accounting" has been used by NFPOs. In fund accounting, money is allocated to separate funds and produce financial statements and reports by fund, or by grouping funds together. Rather than traditional funds or groups of funding sources, the Financial Accounting Standards Board (FASB) introduced several financial accounting standards on how NFPOs should account for contributions and how these contributions are presented in financial statements. However, these accounting standards did not eliminate the reason for not for profit organizations to track and report by fund. They will likely need to *internally track funds* to ensure that monies received from different sources are not commingled; while for *external purposes, they need the net assets classification* required by this accounting standard. Tracking by fund enables NFPOs to create internal reports on how much of a particular source remains unspent, or how much of these different funding sources were spent by a particular program or department.

ACCOUNTING FOR CONTRIBUTIONS

Accounting for contributions is an issue primarily for not-for-profit organizations because contribution is a significant source of revenues for many of those organizations. A contribution is an unconditional transfer of cash or other assets to an entity or a settlement or cancellation of its liabilities in a voluntary nonreciprocal transfer by another entity acting other than as an owner.

Contributions Received

Generally, contributions received shall be recognized as revenues or gains in the period received as assets, decreases of liabilities or expenses depending on the form of the benefits received. It shall be measured at their fair values and shall be reported as restricted support or unrestricted support.

Contributed services shall be recognized if the services received (a.) create or enhance non-financial assets; or (b.) require specialized skills that are provided by individuals possessing those skills (e.g., accountants, doctors, lawyers, carpenters, electricians, and other professionals and craftsmen), and typically needed to be purchased if not provided by donation; otherwise, not recognized. An entity that receives contributed services shall describe the program or activities for which those services were used, as well as the nature and extent of that services and the amount recognized as revenues for the period.

Contributions of works of art, historical treasures, and similar assets need not be recognized as revenue and capitalized if the donated items are added to collections held for public exhibitions, education, or research in furtherance of public service rather than financial gain.

DONOR-IMPOSED RESTRICTIONS

Restriction on contributions received is enabled by a donor's explicit stipulation, or from circumstances surrounding the receipt of the contribution that made clear the donor's implicit restriction on use; otherwise, it is unrestricted. Restrictions may temporary or permanent. Temporarily restricted assets are expected to be released from restriction after the passage of time or the performance of some acts. The release from restrictions causes an increase in unrestricted net assets and a decrease in temporarily restricted net assets. Permanently restricted assets are expected to be restricted for as long as the entity exists. Contributions with donor-imposed restriction shall be reported as restricted support.

A not-for-profit organization shall recognize the expiration of a donor-imposed restriction on a contribution in the period in which the restriction expires. Again, a restriction expires when the stipulated time has elapse; when the stipulated purpose for which the resource was restricted has been fulfilled, or both. If an expense is incurred for a purpose for which both unrestricted and temporarily restricted net asset are available, a donor-imposed restriction is fulfilled to the extent of the expense

incurred unless the expense is for a purpose that is directly attributable to another specific external source of revenue.

CONDITIONAL PROMISES TO GIVE

Pledges may be unconditional or conditional promises to give. The pledges may be unrestricted, temporarily restricted, or permanently restricted based on the circumstances of the pledges and the donor's specification. Conditional promises to give, which depend on the occurrence of a specified future and uncertain event to bind the promisor, shall be recognized when the condition on which they depend are substantially met, that is, when the conditional promise becomes unconditional. A conditional promise to give is considered unconditional if the possibility that the condition will not be met is remote.

Determining whether a promise is conditional or unconditional can be difficult, if it contains donor stipulation that do not clearly state whether the right to receive payment or delivery of the promised assets depends on meeting those stipulations. It may be difficult to determine whether those stipulations are conditions or restrictions. In case of ambiguous donor stipulations, a promise containing stipulations that are not clearly unconditional shall be presumed to be a conditional promise. Note that a donor-imposed *condition* specifies a future and uncertain event whose occurrence or failure to occur gives the promisor a right of return of the assets transferred or releases the promisor from its obligation to transfer the asset promised. In contrast, a donor-imposed *restriction* specifies a use that is more specific than broad limits resulting from the nature of the organization, the environment in which it operates, and the purposes specified in its articles of incorporation or bylaws or comparable documents for an unincorporated association.

CONTRIBUTIONS MADE

Contributions made shall be recognized as expense in the period made and as decrease of assets or increases of liabilities depending on the form of the benefits given. Contributions made shall be measured at the fair value of the assets given or, if made in the form of a settlement or cancellation of a donee's liabilities, at the fair value of the liabilities canceled. Quoted market prices, if available, are the best evidence of the fair value of monetary and nonmonetary assets, including services. If quoted market prices are not available, fair value may be estimated based on quoted

market prices for similar assets, independent appraisals, or valuation techniques, such as the present value of estimated future cash flows.

FINANCIAL REPORTING

NFPO's operations are financed through donations, and, it is but proper that donors must be informed how these donations are spent. Thus, there is the need for these NFPOs to provide adequate, fairly presented financial statements. Financial Accounting Standards Board (FASB) introduced a standard for general-purposed external financial statements provided by a Not for Profit Organization. It specifies that those statements include:

1. Statement of Financial Position
2. Statement of Activities
3. Statement of Cash Flows

It further specifies that Voluntary Health and Welfare Organizations (VHWO) shall continue to provide a Statement of Functional Expenses, which is useful in associating expenses with service efforts and accomplishments of NFPOs.

Statement of Financial Position

The primary purpose of a Statement of Financial Position is to provide relevant information about an organization's assets, liabilities, and net assets; and about their relationship to each other at a moment in time. This statement specifically provides relevant information about liquidity, financial flexibility, and inter-relationship of an organization's assets and liabilities. Cash or other assets received with a donor-imposed restriction should not be classified with cash or other assets that are unrestricted and available for current operations.

This financial statement shall report the amounts for each three classes of net assets, namely:

1. Permanently Restricted Net Assets

   Again, permanently restricted assets are expected to be restricted for as long as the entity exists. This class of net assets includes permanently restricted contributions such as regular endowment for which the principal must be preserved with perpetuity.

2. Temporarily Restricted Net Assets

   This class of net assets have donor-imposed time or purpose restrictions. A time restriction is where the assets will not be available for use until after a specific time has passed. A purpose restriction is where the resources may be used only for specified purposes. Term endowments that have limited lives are also included in temporarily restricted net assets.

3. Unrestricted Net Assets

   This class of net assets is not restricted by a donor and therefore, are used for the entity's general operations. Unrestricted net assets include all assets and liabilities that do not have *externally* imposed restrictions on their use; thus, *internally* imposed restrictions, like, board-designated funds, are still classified as unrestricted net assets.

Statement of Activities

The primary purpose of a Statement of Activities is to provide relevant information about (a.) the effects of transactions and other events and circumstances that change the amount and nature of net assets; (b.) the relationships of those transactions and other events and circumstances to each other; and (c.) how the organization's resources are used in providing various programs or services.

This financial statement shall report the amount of the change in net assets for the period using a descriptive term – "Change in Net Assets" (e.g., Permanently Restricted Net Assets, Temporarily Restricted Net Assets, and Unrestricted Net Assets). This term should articulate to the net assets reported in the Statement of Financial Position. Revenues and expenses are recognized using the *accrual basis* of accounting, and shall be reported at gross amounts; however, gains or losses may be reported at net amounts, if they result from incidental transactions or from events and circumstances that may be largely beyond its control.

Statement of Cash Flows

The primary purpose of the Statement of Cash Flows is to provide relevant information about cash receipts and cash payments of an organization during a period. Similar with commercial accounting, this financial statement presents the standard classification system, such as: Cash Flows from Operating Activities, Cash

actually received from the students. Similarly, any tuition and fees paid at the beginning of the class term by the students withdrawing from classes, the university accounts for these reimbursements of tuition and fees as a reduction of revenue.

Accounting for ***private*** *colleges and universities* is a shift away from a fund group focus to an organization-wide focus, where there is no requirement for external financial statements to include fund group reporting. Instead of fund balances, three net asset classes (e.g., *unrestricted, temporarily restricted, and permanently restricted* are used.

Current accounting standards for Not-for-profit-Organizations does not require private not-for-profit colleges and universities but they are free to use fund-based structure. Fund accounting creates an accounting discipline and provides to track revenue and expenses related to specific programs.

The three financial statements required for private not-for-profit colleges and universities are the: Statement of Financial Position, Statement of Activities, and Statement of Cash Flows.

ACCOUNTING FOR HEALTH CARE PROVIDERS

Although the major focus of accounting for Health Care Providers (HCPs) is on hospital, the accounting and financial reporting guidelines for hospital are the same as those used by all health care providers (e.g. medical clinics, ambulatory care organizations, continuing-care retirement communities, health maintenance organizations, home health agencies, nursing homes, rehabilitation facilities).

Health care providers frequently receive less than the full amount of patient service charges, which is its largest source of revenue, due to the presence of third-party payors (e.g. medicare, insurance companies). These third-party payors often establish contractual arrangements with health care providers stipulating set rates that will be paid for specific services, where the entities agree, in effect, to accept as payment in full an amount the third-party payors compute as reasonable based on the average cost within the locality in which the service was rendered.

Although not required, many hospitals have used a fund accounting structure for accounting purposes. In general, operating activities are carried on in the general fund and a series of restricted funds to account for assets that has been restricted by

Flows from Investing Activities, and Cash Flows from Financing Activities. As with for profit entities Cash Flows from Operating Activities may be presented either by the direct or indirect method. For not for profit entities, they may use any of the two methods, but they are encouraged to use the direct method. For those that choose to use the direct method, a new Accounting Standards Update eliminates the requirements of reconciling the direct and indirect methods. This added work of reconciliation has sometimes been blamed for the reluctance of some entities for adopting the direct method.

Statement of Functional Expenses

As mentioned earlier, in addition to the above-mentioned financial statements, Voluntary Health and Welfare Organizations (VHWOs) have long been required to prepare a *Statement of Functional Expenses*, a financial statement that provides a detailed schedule of expenses by *function* (e.g., various programs and administrative activities) and by *nature* (e.g., salaries, supplies, etc.). VHWOs are different from other organizations, like, private universities or hospitals that generate a considerable amount of revenue from services provided. VHWOs primarily depend on donations rather than membership fees, tuition fees, etc., thus, wise utilization of financial resources is of paramount importance to the users of the financial statements.

ACCOUNTING FOR NOT FOR PROFIT COLLEGES AND UNIVERSITIES

The accounting and financial reporting for governmental, not-for-profit entities is covered by the Governmental Accounting Standards; whereas, non-governmental not-for-profit entities is covered by the Financial Accounting Standards.

Public college and university funds include three broad categories, such as: (1.) *current funds,* which may be restricted or unrestricted, (2.) *plant funds,* and (3.) *trust and agency funds.* Plant funds of public colleges and universities include four separate, self-balancing subgroups, namely: *unexpended plant fund, plant fund for renewals and replacements, plant fund for retirement of indebtedness, and investment in plant.*

Private not-for-profit colleges and universities receive most of their resources from tuition and fees. To account for these tuition and fees, the full amount of the standard rate is recognized as revenue. Scholarships and other financial assistance are subtracted directly from this revenue to better reflect the reality of the amount

the donor. If no separate funds are maintained, all transactions are recorded in the general fund, with memorandum showing the restrictions.

Not-for-profit hospitals issue four basic financial statements, as follows: Statement of Financial Position, Statement of Operations, Statement of Changes in Net Assets, and Statement of Cash Flows. The presentation of financial statement information requires a distinction between those net assets that are unrestricted, temporarily restricted, and permanently restricted. Revenue, expenses, gains, and losses increase or decrease the net assets of health care providers. Revenue and expenses may be operating if they are related to the principal activity; however, they may be non-operating if they are incidental or from events beyond the entity's control.

ACCOUNTING FOR VOLUNTARY HEALTH AND WELFARE ORGANIZATION

Another not-for-profit organization is the Voluntary Health and Welfare Organization (VHWO), which provides a variety of social services in the area of health, welfare or community services. These organizations solicit funds from the community as a whole and typically provide their services for no fee, or sometimes, they may charge a nominal fee to those with the ability to pay.

In order to fully measure the resources available to the organization, the accrual basis of accounting is required for VHWOs. Further, although not required like other NFPOs, VHWOs have been free to use fund accounting and reporting. And to segregate resources with external restrictions, the organization must report these items under three classes of net assets, such as: unrestricted, temporarily restricted, and permanently restricted. Accounting for VHWOs, is similar to other NFPOs except for special financial statements that report on the important aspects of VHWOs by supplementing the operating statements and presents the total of each functional expenses to programs and supporting services. Current accounting standards require them to provide the following financial statements: Statement of Financial Position, Statement of Activities, Statement of Cash Flows, and Statement of Functional Expenses.

ACCOUNTING FOR OTHER NOT-FOR-PROFIT ORGANIZATIONS

In addition to colleges and universities, health care providers, and voluntary health and welfare organizations, there are many types of NFPOs, such as: religious organizations, country clubs, museums, etc. Again, organizations that have restricted

resources may use fund accounting for internal control and management reporting purposes in order to demonstrate compliance with externally imposed restrictions.

While accrual accounting is required for all other not-for-profit organizations, some small organizations operate on a cash basis during the year and convert to an accrual basis at year-end.

A Statement of Financial Position, Statement of Activities, and Statement of Cash Flows are required for financial reporting purposes. Overall, the reporting requirements of other not-for-profit organizations are substantially the same as for VHWOs and that's why when a large number of programs or a number of very different types of programs are part of the operations of an other not-for-profit organization, it may be desirable to prepare a statement of expenses by functional area or major program as well.

MULTIPLE CHOICE – Theory of Accounts

TOA 20-1 (Author)

Which of the following funds shall be classified as temporarily restricted net asset in statement of financial position of nonprofit organization?

a. Board designated plant fund
b. Term endowment fund
c. Regular endowment fund
d. Current operation fund

TOA 20-2 (Author)

Which of the following funds shall be classified as unrestricted net asset in statement of financial position of nonprofit organization?

a. Internally restricted fund
b. Plant endowment fund
c. Annuity fund
d. Life income fund

TOA 20-3 (Author)

In the statement of activities, expenses of nonprofit organization shall be recorded only as reduction from

a. Temporarily restricted net assets
b. Unrestricted net assets
c. Permanently restricted net assets
d. Current liability

TOA 20-4 (Author)

Last year, a nonprofit organization received a contribution with a donor restriction for educational scholarship of its members. In the current year, the nonprofit organization fully spent the said contribution for the intended purpose. What is the effect of this expenditure to current year's change in net assets?

a. It will increase the temporarily restricted net assets.
b. It will not affect the unrestricted net assets.
c. It will not affect the total net assets.
d. It will decrease the permanently restricted net assets.

TOA 20-5 (Author)

In the statement of cash flows of nonprofit organization, how shall the following cash flows be presented?

I. Cash receipts from other income and gain
II. Cash payments for the acquisition of equipment
III. Cash receipts from donor who imposed term restriction

a. Operating, Investing, Financing
b. Investing, Financing, Operating
c. Financing, Operating, Investing
d. Operating, Financing, Investing

TOA 20-6 (Adapter)

Which of the following is not a characteristic of a split-interest agreement?

a. The period covered may be the remaining life of a designated individual.
b. At the end of the agreement, the remaining assets must be distributed to the trustee.
c. A split-interest agreement may be revocable.
d. Distributions may be made to beneficiaries during the life of the agreement.

TOA 20-7 AICPA)

A successful alumnus of a private university has recently donated P1,000,000 to that university for the purpose of funding a "center for the study of sports ethics." This donation is conditional upon the university raising matching funds within the next 12 months. The university administrators estimate that they have a 50% chance of raising the additional money. How should this donation be accounted for?

a. As a temporarily restricted support.
b. As unrestricted support.
c. As a refundable advance.
d. As a memorandum entry reported in the footnotes.

TOA 20-8 (Adapted)

General purpose external financial reporting by a health care organization requires presentation of

a. Fund group information by a not-for-profit organization.
b. A statement of operation.
c. A separate statement of changes in equity, net assets, or fund balance.
d. A performance indicator only by for-profit entities.

TOA 20-9 (AICPA)

In June, Park Hospital purchased medicines from Jove Pharmaceutical Co. at a cost of P2,000. However, Jove notified Park that the invoice was being canceled, and the medicines were being donated to Park. Park should record this donation of medicines as

a. A memorandum entry only.
b. Other operating revenue of P2,000.
c. A P2,000 credit to operating expenses.
d. A P2,000 credit to nonoperating expenses.

TOA 20-10 (AICPA)

In 2020, Wells Hospital received an unrestricted bequest of common stock with a fair market value of P50,000 on the date of receipt of the stock. The testator had paid P20,000 for this stock in 2018. Wells should record this bequest as

a. Nonoperating revenue of P50,000.
b. Nonoperating revenue of P30,000.
c. Nonoperating revenue of P20,000.
d. A memorandum entry only

TOA 20-11 (AICPA)

Cedar Hospital has a marketable equity securities portfolio that is appropriately included in the noncurrent assets in unrestricted funds. The portfolio has an aggregate cost of P300,000. It had an aggregate fair market value of P250,000 at the end of 2020 and P290,000 at the end of 2019. If the portfolio was properly reported in the balance sheet at the end of 2019, the change in the valuation allowance at the end of 2020 would be

a. P 0.
b. A decrease of P40,000.
c. An increase of P40,000.
d. An increase of P50,000.

TOA 20-12 (AICPA)

Environs, a community foundation, incurred P10,000 in management and general expenses during 2020. In Environs' statement of activities for the year ended December 31, 2020, the P10,000 should be reported as:

a. A direct reduction of unrestricted net assets.
b. Part of supporting services expenses.
c. Part of program services expenses.
d. A contra-account to offset revenue and support.

MULTIPLE CHOICE - Problems

PROB. 20-1 (AICPA)

Public College's unrestricted current fund comprised the following:

Assets	P 5,000,000
Liabilities (including deferred revenues of P100,000)	3,000,000

What is the fund balance of Public College's unrestricted current fund?

a. 1,900,000
b. 2,000,000
c. 2,100,000
d. 5,000,000

PROB. 20-2 (AICPA)

Ross Hospital's accounting records disclosed the following information:

Net sources invested in plant assets	P 10,000,000
Board-designated funds	2,000,000

What amount should be included as part of unrestricted funds?

a. 12,000,000
b. 10,000,000
c. 2,000,000
d. 0

PROB. 20-3 (AICPA)

During the year, the board of trustees of Burr Private University designated P100,000 from its current funds for college scholarships. And in that year, the university received a bequest of P200,000 from an estate of a benefactor who specified that the bequest was to be used for hiring teachers to tutor handicapped students. None of the bequest has been spent.

What amount should be accounted for as restricted net assets?

a. 0
b. 100,000
c. 200,000
d. 300,000

PROB. 20-4 (AICPA)

In year 2, a nongovernmental not-for-profit organization received a P1,000,000 contribution to fund scholarships for their students. The donor stipulated that only the interest earned on the contribution be used for the scholarships. Interest earned in year 2 of P150,000 was used to award scholarships in year 3. What amount should be reported as temporarily restricted net assets at the end of year 2?

a. 1,150,000
b. 1,000,000
c. 150,000
d. 0

PROB. 20-5 (AICPA)

On December 30, 2020, a not-for-profit organization received a P7,000,000 donation of Day Care Co. shares with donor stipulated requirements as follows:

- Shares valued at P5,000,000 are to be sold with the proceeds used to construct a public viewing building.
- Shares valued at P2,000,000 are to be retained with the dividend used to support current operations.

As a consequence of the receipt of these shares, how much should the not-for-profit organization report as temporarily restricted net assets on its 2020 statement of financial position?

a. 0
b. 2,000,000
c. 5,000,000
d. 7,000,000

PROB. 20-6 (AICPA)

Child Care Center, Inc. a not for profit organization, receives revenue from various sources during the year to support its day care centers. The following cash amounts were received during 2020:

- P2,000 restricted by the donor to be used for meals for the children.
- P1,500 received for subscription to a monthly child care magazine with a fair market value to subscribers of P1,000.
- P10,000 to be used only upon completion of a new playroom that was only 50% complete at December 31, 2020.

What amount should Child Care Centers record as contribution revenue in its 2020 Statement of Activities?

a. 2,000
b. 2,500
c. 10,000
d. 11,000

PROB. 20-7 (AICPA)

The following information pertains to interest received by Beech Public University from endowment fund investment for the year ended June 30:

	Received	Expended for Current Operations
Unrestricted	P 300,000	P 100,000
Restricted	500,000	75,000

What amount should be credited to endowment income for the year ended June 30?

a. 800,000
b. 375,000
c. 175,000
d. 100,000

PROB. 20-8 (AICPA)

The following funds were among those held by State College at December 31:

Principal specified by the donor as nonexpendable	P 500,000
Principal expendable after five years	300,000
Principal designated from current funds	100,000

What amount should State College classify as regular endowment funds?

a. 100,000
b. 300,000
c. 500,000
d. 900,000

PROB. 20-9 (AICPA)

The League, a not-for-profit organization, received the following pledges:

Unrestricted	P 200,000
Restricted for capital additions	150,000

All pledges are legally enforceable; however, the League's experience indicates that 10% of all pledges prove to be uncollectible. What amount should the League report as pledges receivable net of any required allowance account?

a. 135,000
b. 180,000
c. 315,000
d. 350,000

PROB. 20-10 (AICPA)

On March 1, A. C. Rowe established a P100,000 endowment fund, the income from which is to be paid to Elm Hospital for general operating purposes. Elm does not control the fund's principal. Rowe appointed West National Bank as trustee of this fund. What journal entry is required by Elm to record the establishment of the endowment?

a.	Cash	100,000	
	Nonexpendable endowment fund		100,000
b.	Cash	100,000	
	Nonoperating revenue		100,000
c.	Nonexpendable endowment fund	100,000	
	Endowment fund balance		100,000
d.	Memorandum entry only		

PROB. 20-11 (AICPA)

For the first semester of the current year, Public University assessed its students P4,000,000 (net of refunds), covering tuition and fees for educational and general purposes. However, only P3,700,000 was expected to be realized because tuition remissions of P80,000 were allowed to faculty members' children attending Public University, and scholarship totaling P220,000 were granted to students. What amount should Public University include in education and general current funds revenues from student tuition and fees?

a. 4,000,000
b. 3,920,000
c. 3,780,000
d. 3,700,000

PROB. 20-12 (AICPA)

On July 31 of the current year, Sabio Public College showed the following amount to be used:

Renewal and replacement of college properties	P 200,000
Retirement of indebtedness on college properties	300,000
Purchase of physical properties for college purposes, but unexpended at July 31 (current year)	400,000

What total amount should be included in Sabio's plant funds at July 31of the current year?

a. 900,000
b. 600,000
c. 400,000
d. 200,000

PROB. 20-13 AICPA)

The following expenditures were among those incurred by Cheviot Public University during the current year:

Administrative data processing	P 50,000
Scholarships and fellowships	100,000
Operation and maintenance of physical plant	200,000

The amount to be included in the functional classification "Institutional Support" expenditures account is

a. 50,000
b. 150,000
c. 250,000
d. 350,000

PROB. 20-14 (AICPA)

Berkeley University, a private not for profit university, had the following cash inflows during the year ended:

- P500,.000 from students for tuition fees.
- P300.000 from a donor who stipulated that the money be invested indefinitely.
- P100,000 from a donor who stipulated that the money be spent in accordance with the wishes of Berkeley's governing board.

On Berkeley's statement of cash flows for the year ended June 30, 2020, what amount of these cash flows should be reported as operating activities?

a. 900,000
b. 400,000
c. 800,000
d. 600,000

PROB. 20-15 (AICPA)

Under Cura Hospital's established rate structure, patient service revenues of P9,000,000 would have earned for the year ended December 31, 2020. However, only P6,750,000 was collected because of charity allowances of P1,500,000 and discounts of P750,000 to third-party payors. For the year ended December 31, 2020, what amount should Cura record as patient service revenues?

a. 6,750,000
b. 7,500,000
c. 8,250,000
d. 9,000,000

PROB. 20-16 (AICPA)

In 2020, Pyle Hospital received a P250,000 pure endowment grant. Also in 2020, Pyle's governing board designated, for special uses, P300,000 which had originated from unrestricted gifts. What amount of these resources should be accounted for as part of the unrestricted net asset class?

a. 0
b. 250,000
c. 300,000
d. 550,000

PROB. 20-17 (AICPA)

An organization of high school seniors performs services for patients at Leer Hospital. These students are volunteers and perform services that the hospital would not otherwise provide, such as wheeling patients in the park and reading to patients. Leer has no employer-employee relationship with these volunteers, who donated 5,000 hours of service to Leer in 2020. At the minimum wage rate, these services would amount to P18,750, while it is estimated that the fair market value of these services was P25,000. In Leer's statement of revenues and expenses, what amount should be reported as nonoperating revenue?

a. 25,000
b. 18,750
c. 6,250
d. 0

PROB. 20-18 (AICPA)

Wilson Hospital, a nonprofit hospital affiliated with Wilson College, had the following cash receipts for the year ended December 31, 2020:

Collections of health care receivables	750,000
Contribution from donor to establish a term endowment	250,000
Tuition from nursing school	50,000
Dividends received from investment in permanent endowment	80,000

The dividends received are restricted by the donor for hospital building improvements. No improvements were made during 2020. On the hospital's

statement of cash flows for the year ended December 31, 2020, what amount of these cash receipts would be included in the amount reported for net cash provided (used) by operating activities?

a. 880,000
b. 800,000
c. 1,050,000
d. 750,000

PROB. 20-19 (AICPA)

Unity fund is a voluntary welfare organization funded by contributions from the general public. During 2020, unrestricted pledges of P100,000 were received, half of which were payable in 2020, with other half payable in 2021 for use in 2021. It was estimated that 20% of these pledges would be uncollectible. With respect to the pledges, the amount that should be reported for 2020 as net contributions, under public support, is

a. 100,000
b. 80,000
c. 50,000
d. 40,000

PROB. 20-20 (AICPA)

During the current year, a VHWO receives unrestricted pledges of P300,000. Of this amount, P100,000 has been designated by donors for use next year to support operations. If 15% of the unrestricted pledges are expected to be uncollectible, what amount of unrestricted support should the organization recognize in its current year financial statements?

a. 300,000
b. 270,000
c. 200,000
d. 170,000

PROB. 20-21 (AICPA)

In April 2019, Alice Reed donated P100,000 cash to her church, with the stipulation that the income generated from this gift is to be paid to Alice during

her lifetime. The conditions of this donation are that, after Alice dies, the principal can be used by the church for any purpose voted on by the church elders. The church received interest of P8,000 on the P100,000 for the year ended March 31, 2020 and the interest was remitted to Alice. In the church's March 31, 2020 financial statements

a. P8,000 should be reported under support and revenue in the activity statement.
b. P92,000 should be reported under support and revenue in the activity statement.
c. P100,000 should be reported as deferred support in the balance sheet.
d. The gift and its terms should be disclosed only in notes to the financial statements.

PROB. 20-22 (AICPA)

The following expenditures were among those incurred by a nonprofit botanical society during the current year:

Printing of annual report	P 10,000
Unsolicited merchandise sent to encourage contributions	20,000

What amount should be classified as fund-raising costs in the society's activity statement?

a. 0
b. 10,000
c. 20,000
d. 30,000

PROB. 20-23 (AICPA)

On January 1, Donations, a nongovernmental not-for-profit organization, received P20,000 and an unconditional pledge of P20,000 for each of the next four calendar years to be paid on the first day of each year. The present value of an ordinary annuity for four years at a constant interest rate of 8% is 3.312. What amount of restricted net assets is reported in the year the pledge was received?

a. 66,240
b. 80,000
c. 86,240
d. 100,000

PROB. 20-24 (AICPA)

On January 2, 2020, a nonprofit botanical society received a gift of an exhaustible fixed asset with an estimated useful life of 10 years and no salvage value. The donor's cost of this asset was P20,000, and its fair market value at the date of the gift was P30,000. What amount of depreciation of this asset should the society recognize in its 2020 financial statements?

a. 3,000
b. 2,500
c. 2,000
d. 0

PROB. 20-25 (AICPA)

The Baguio Foundation, a not-for-profit organization had the following contributions and expenditures for 2020:

- Unrestricted cash contributions of P500,000.
- Cash contributions of P200,000 restricted by the donor to the acquisition of property.
- Cash expenditures of P200,000 to acquire property with the donation in the above item.

Baguio Foundation's statement of cash flows should include which of the following amounts for operating, investing, and financing activities, respectively?

a.	500,000	(200,000)	200,000
b.	500,000	0	0
c.	700,000	(200,000)	0
d.	0	500,000	200,000

PROB. 20-26 (Author)

On the first year of operations of a non-profit organization, the following transactions occurred:

- The non-profit organization received P1,000,000 fund from a donor who stipulated that it shall be invested indefinitely and the dividend from such investment shall be used for research project of the organization. Dividend amounting to P150,000 was received during the year but only P50,000 was spent for the research project.

- The non-profit organization received P300,000 fund from a donor who stipulated that it shall be used for the acquisition of service car. P100,000 of the fund was used for the acquisition of a service car with useful life of 5 years. The car was acquired at the middle of the year.

- The non-profit organization received P500,000 fund from a donor who stipulated that it shall be used based on the discretion of the Board of Trustees of the non-profit organization. P100,000 was used by the organization for the acquisition of souvenir items which were sold by the non-profit organization for P150,000. The remaining P400,000 was designated by the Board of Trustees for future fundraising projects.

a. What is the amount of permanently restricted net assets at the end of the first year?
   a. 1,100,000
   b. 1,300,000
   c. 1,200,000
   d. 1,000,000

b. What is the amount of temporarily restricted net assets at the end of the year?
   a. 100,000
   b. 300,000
   c. 200,000
   d. 700,000

c. What is the amount of unrestricted net assets at the end of the year?
   a. 640,000
   b. 540,000
   c. 590,000
   d. 630,000

PROB. 20-27 (Author)

On January 1, 2020, a non-profit organization, received P1,000,000 cash donation from a donor who stipulated that the amount should be invested indefinitely in revenue producing investment. The deed of donation also provides that the dividend income shall be used for the acquisition of computers of the non-profit organization.

On December 31, 2020, the non-profit organization received P100,000 cash as dividend income from the investment of the fund.

On January 1, 2021, the non-profit organization acquired a computer at a cost of P20,000 with a useful life of 5 years without residual value.

a. In the statement of activities of the statement the NPO for the year ended December 31, 2020, which of the following is the proper effect of the transactions?
   a. Increase in temporarily restricted net assets by P100,000.
   b. Increase in unrestricted net assets by P10,000,000.
   c. Increase in unrestricted net assets by P16,000.
   d. Decrease in temporarily restricted net assets by P20,000

b. In the statement of activities of the statement the NPO for the year ended December 31, 2021, which of the following is the proper effect of the transactions?
   a. Increase in temporarily restricted net assets by P100,000.
   b. Increase in unrestricted net assets by P1,000,000.
   c. Increase in unrestricted net assets by P16,000
   d. Decrease in temporarily restricted net assets by P100,000

c. How shall the cash flows be reported in NPO's Statement of Cash Flows for the year ended December 31, 2020?
   a. Cash receipts from operating activities by P100,000.
   b. Cash receipts from financing activities by P1,100,000.
   c. Cash disbursements for investing activities by P50,000.
   d. Cash disbursements for financing activities by P1,000,000.

d. How shall the cash flows be reported in NPO's Statement of Cash Flows for the year ended December 31, 2021?

a. Cash receipts from operating activities by P100,000.
b. Cash receipts from financing activities by P1,100,000.
c. Cash disbursements for investing activities by P20,000.
d. Cash disbursements for investing activities by P100,000.

ANSWERS – Theory of Accounts

TOA 20-1 *Suggested answer (b) Term endowment*

TOA 20-2 *Suggested answer (a) Internally restricted fund*

TOA 20-3 *Suggested answer (b) Unrestricted net assets*

TOA 20-4 *Suggested answer (b) It will not affect the unrestricted net assets*

TOA 20-5 *Suggested answer (a) Operating, Investing, Financing*

TOA 20-6 *Suggested answer (b) At the end of the agreement, the remaining assets must be distributed to the trustee.*

A split-interest agreement is an agreement under which a not-for-profit organization may share benefits with others. It may be a revocable or irrevocable. The period covered maybe a specific number of years (or in perpetuity) or the remaining life of a designated individual or individuals. The assets are invested by the not-for-profit organization, a trustee, or a fiscal agent, and distributions are made to beneficiaries during the term of the agreement. At the end of the agreement, the remaining assets are distributed to or retained by either the not-for-profit organization or another beneficiary.

TOA 20-7 *Suggested answer (c) As a refundable advance.*

Conditional promises to give, which depend on the occurrence of a specified future and uncertain event to bind the promisor, shall be recognized when the conditions on which they depend are substantially met. The donation described in this question is conditioned upon a match in which there is considerable uncertainty. Thus, the donation should be accounted for as a refundable advance until the matching condition is met.

TOA 20-8 *Suggested answer (b) A statement of operations*

The basic financial statements of a health care organization include balance sheet; a statement of operations; a statement of changes in equity, net assets, or fund balance; and a statement of cash flows.

TOA 20-9 *Suggested answer* (b) Other operating revenue of P2,000.

Donated goods and services that would otherwise be purchased are recorded as other operating revenue.

TOA 20-10 *Suggested answer* (a) Nonoperating revenue of P50,000.

Nonoperating revenue account records revenue not related directly to an entity's principal operations. Therefore, the hospital should record the donated common stock, at its fair market value at the date of receipt, as nonoperating revenue in the amount of P50,000.

TOA 20-11 *Suggested answer* (c) An increase of P40,000.

The audit guide permits that investment be carried either at cost or at market value, but the same basis must be applied to all the investment. Cost includes not only the total cost of purchased investments but also the market value at the date of receipt of donated investments. When there is a permanent reduction in market value, the impairment to cost should be recorded. In this case, where there was a further decline in market value (from P290,000 to P250,000), the valuation allowance should be increased by P40,000.

TOA 20-12 *Suggested answer (b) Part of supporting services.*

The operating statements of an organization should not show typical expenses, such as salaries or rent, but should show the cost of each program or services the organization provides, that is, the cost in which the general public, the contributors, and the controlling agencies primarily are interested. These projects fall in two expenses grouping, namely: 1.) Program services, and 2.) Supporting services. The supporting services group includes management and general expenses, like all management, financing, and administrative activities, except for direct activities of program or fund-raising.

SOLUTIONS - Problems

PROB. 20-1 *Suggested answer* (b) P2,000,000

Assets	P 5,000,000
Less liabilities (including deferred revenues of P100,000)	3,000,000
Fund balance	P 2,000,000

Traditional accounting procedures for public colleges and universities emphasize the flow of financial resources and fund accounting. College and university funds include three broad categories: current funds, plant funds, and trust and agency fund. Current funds may be restricted or unrestricted.

PROB. 20-2 *Suggested answer* (a) P12,000,000

Assets whose use is limited include assets set aside by the governing board for a specific purpose, sometimes referred to as board designated assets. Since the limitation is internal, assets remain unrestricted, because restrictions can only be created by outside sources. Restrictions on net resources invested in plant assets are released when assets are placed in service. Therefore, the amount of unrestricted net assets would be P12,000,000.

PROB. 20-3 *Suggested answer* (c) P200,000

The focus on financial reporting for private colleges and universities emphasizes the organization as a whole. Instead of fund balances, three net asset classes are used, such as: unrestricted, temporarily restricted, and permanently restricted.

In this case, the P200,000 received from an estate of a benefactor, which is externally restricted, would be reported as current restricted funds; while the board-designated funds are accounted for in the current unrestricted funds because it is internally restricted and the board can rescind its action anytime at its discretion.

PROB. 20-4 *Suggested answer (c) P150,000*

The P1,000,000 contribution received is a permanent endowment that is classified as permanently restricted net assets; while the P150,000 interest earned that are stipulated to be used for scholarship is classified as temporarily restricted in year 2, because its restriction will expire in year 3 where it will be used to award scholarship.

PROB. 20-5 *Suggested answer (c) 5,000,000*

In the statement of financial position of a not-for-profit organization, the shares valued at P5,000,000 is a temporarily restricted net assets due to the purpose that its proceeds shall be used to construct a public viewing building. Once the purpose is met, the restriction is released, thus temporarily restricted. The shares valued at P2,000,000 is permanently restricted because it is to be retained; while the corresponding dividends shall be classified as unrestricted because it is to be used to support current operations.

PROB. 20-6 *Suggested answer (b) 2,500*

Restricted by donor to be used for meals for the children	2,000
Excess of amount received over the fair value of magazine (1,500 – 1,000)	500
Total contribution revenue	2,500

The accounting for VHWO provides that revenues are inflows of resources resulting from a charge for service from financial activities or from other exchange transactions. The amount (P10,000) to be used upon completion of a new playroom is not part of 2020 revenue, because a condition, completion of a new playroom, has not been fulfilled (50% complete).

PROB. 20-7 *Suggested answer* (b) P375,000

Income on unrestricted endowment received	P 300,000
Income on restricted endowment expended	75,000
Total endowment income	P 375,000

The resources for endowment funds are often pooled for investment purposes, with the various fund balances sharing proportionately in the outcome based on the market values of investment at the time of pooling or at specified future dates. Income on which there is no restriction should be transferred in the unrestricted current fund, where it is credited to endowment income. While, income earned on restricted endowment resources should be transferred in the fund balance of the restricted current fund, loan fund, endowment fund or plant fund, depending upon which fund the donor has specified should reap the benefits. Therefore, the full amount of unrestricted endowment must be recognized as revenue in the year received, and only the restricted endowment expended in the year will be recognized as revenue.

PROB. 20-8 *Suggested answer* (c) P500,000

Regular or Pure Endowment Funds are those whose principal has been specified by the donor as nonexpendable; therefore, the amount to classify as regular endowment would be P500,000. The principal expendable after five years in the amount of P300,000 is term endowment fund; while, the principal designated from current fund would not be classified neither term or regular endowment.

PROB. 20-9 *Suggested answer (c) P315,000*

Unrestricted	P 200,000
Restricted for capital additions	150,000
Total	350,000
Multiply by % of collectability	90%
Pledge receivable, net of required allowance	P 315,000

Again, contributions include unconditional promise to give (pledge) and are recognized when received. It may be unrestricted or restricted for a specific purpose. Therefore, both restricted and unrestricted contributions are recognized in the period made.

PROB. 20-10 *Suggested answer* (d) Memorandum entry only

Endowment funds of a hospital, whose principal is held in trust by outside parties should not be included in the hospital's balance sheet but its existence should be recorded through a memorandum entry.

PROB. 20-11 *Suggested answer* (a) P4,000,000

A public university may establish one master control account for unrestricted revenues, with details as to major sources recorded in subsidiary records. Among these major groups of revenues is the educational and general revenues group, with accounts for, among others, student tuition and fees, which were recognized when due or billed, net of appropriate allowance for uncollectibles. Further, revenues from student tuition fees include all tuition and fees assessed (net of refunds) for educational and general purposes. Tuition remissions and scholarship are student aid expenditures, thus, the P4,000,000, net of refunds, should be properly as tuition and fees revenues.

PROB. 20-12 *Suggested answer* (a) P900,000

Plant funds of public colleges and universities include four separate subgroups:

1. *Unexpended Plant Funds – for resources that are to be used to acquire properties.*
2. *Plant Fund for Renewals and Replacements – for resources that are available to keep the physical plant in operating condition.*
3. *Plant Fund for Retirement of Indebtedness – for the resources accumulated for the payment of interest and principal of plant fund indebtedness.*
4. *Investment in Plant – for all plant assets except those found in the endowment fund.*

Therefore, all of the items presented with a total amount of P900,000 would be included in plant funds at July 31.

PROB. 20-13 *Suggested answer* (a) P50,000

Institutional support expenditures are those of central administration. Scholarship and fellowship are student aid expenditures. And the P200,000 is operation and maintenance of plant expenditures. Therefore, the amount

to be included as institutional support would be P50,000 (administrative data processing).

PROB. 20-14 *Suggested answer (d) 600,000*

Non-governmental not for profit organizations are required to report a statement of cash flows. This financial statement reports cash flows from operating, investing, and financing activities. Cash flows related to revenue and expenses that are unrestricted should be reported in the operating activities section. The cash flows from both tuition fees in the amount of P500,000 and the unrestricted contribution of P100,000 are both unrestricted and should be reported as operating activities. Restricted contributions for long-term purposes, like endowment, are reported as financing activities in the statement of cash flows. Thus, the amount of cash flows to be reported in operating activities section is P600,000 (500,000 + 100,000).

PROB. 20-15 *Suggested answer* (d) P9,000,000

Patient service revenue is the major revenue account for a hospital, in which the gross revenue earned is recorded on an accrual basis at established rate for: Routine services, Other nursing services, and Professional services. Charity allowances and discounts are reported as deduction from patient service revenue. Since in this case, what is being asked is the patient service revenues, therefore, the gross amount of patient service revenue in the amount of P9,000,000 must be recorded.

PROB. 20-16 *Suggested answer* (c) P300,000

Pure or Regular Endowments are those whose principal has been specified by the donor as nonexpendable. While the board designated restriction is part of unrestricted net assets, because there is no external restriction on the use of fund. Therefore, P300,000 should be accounted for as part of the unrestricted net asset.

PROB. 20-17 *Suggested answer* (d) P 0

When there is an employer-employee relationship, the services rendered should be recorded as nonoperating revenue at its fair market value. However, when there is no employer-employee relationship, no amount will be recorded as nonoperating revenue.

PROB. 20-18 *Suggested answer (b) 800,000*

Collections of health care services	750,000
Tuition from nursing school	50,000
Net cash provided by operating activities	800,000

The cash flows from revenue, gains, and other support, which are reported on the hospital's statement of operations, would be included in the net cash provided (used) by operating activities on the statement of cash flows. Accordingly, both net patient service revenue and tuition revenue are included in the amount reported for cash flows from operating activities. The cash received for the term endowment and cash received from dividends are cash flows provided by financing activities, and therefore, would not be included in operating activities.

PROB. 20-19 *Suggested answer* (d) P40,000

Net contributions (P100,000 x ½ x 80%)	P 40,000

Contributions received are recognized as public support in the period received and as assets, decreases of liabilities, or expenses depending on the form of benefits received. It includes, among others, pledge, which is an unconditional promise to give. Therefore, unconditional promise to give (pledge) must be recognized as support in the period received. Further, a provision and an allowance for estimated uncollectible pledges are established based on historical collection experience. The provision for uncollectible pledges is an expense account, while the allowance is a contra account to Pledges Receivable.

PROB. 20-20 *Suggested answer (d) 170,000*

Total unrestricted pledges	300,000
Less temporarily restricted pledge (for use next year)	100,000
Balance unrestricted pledges/support	200,000
Less estimated uncollectible (15% x 200,000)	30,000
Unrestricted support for the current year	170,000

The information provided in the problem states that 15% of the unrestricted pledges are expected to be uncollectible; thus considered after deducting the temporarily restricted pledge.

PROB. 20-21 *Suggested answer (c) P100,000 as deferred support.*

Life income funds are used to account for assets given to an institution with the stipulation that the institution will make certain payments to a designated recipient over a specified period. Since the gift is restricted for use until the donor's death, the institution should report the principal as deferred support in the balance sheet.

PROB. 20-22 *Suggested answer (c) P20,000*

Fund raising costs are those costs incurred to induce contributions of money, securities, real estate and other properties, materials or time to the organization. The cost of printing annual report can be appropriately reported as management and general expenses. Therefore, the only fund raising cost is the cost of unsolicited merchandise sent to encourage contributions in the amount of P20,000.

PROB. 20-23 *Suggested answer (a) P66,240*

The P20,000 received on January 1 is a contribution in that year and is an increase in unrestricted net assets. The pledge in the next four years is a temporarily restricted net asset as to time and is recognized at the net present value, that is P66,240 (P20,000 x 3.312).

PROB. 20-24 *Suggested answer (a) P3,000*

Depreciation (P30,000/ 10 years)	P 3,000

Donated fixed assets are recorded at its fair market value at the date of donation. Depreciation and accumulated depreciation are recorded based on the estimated useful life of the depreciable asset.

PROB. 20-25 *Suggested answer (a) 500,000 (200,000) 200,000*

In the statement of cash flows of a not-for-profit organization, the unrestricted cash contributions is an operating activity, the cash contributions of P200,000 restricted to the acquisition of property is a financing activity, and the cash expenditures of P200,000 to acquire the property is an investing activity.

PROB. 20-26

a. Suggested answer (d) 1,000,000

Permanently restricted net asset	1,000,000

Note: Only the fund which is to be invested indefinitely is considered permanent or regular endowment fund.

b. Suggested answer: (b) 300,000

Remaining unspent dividend income for research (150,000 – 50,000)	
Remaining unused fund for acquisition of service car (300,000 – 100,000)	100,000
Temporarily restricted net assets	200,000
	300,000

c. Suggested answer: (a) 640,000

Reclassification from temporarily restricted dividend income		50,000
Reclassification from temporarily restricted service car fund		100,000
Fund subject to discretion of board of trustees		500,000
Gain on sale of souvenir items (150,000 – 100,000)		50,000
Total		700,000
Less: Research expense	50,000	
Depreciation expense of service car (100,000/5 x 6/12)	10,000	60,000
Unrestricted net assets		640,000

PROB. 20-27

a. Suggested answer (a) 100,000

Increase in temporarily restricted net assets during 2020	100,000

Note: The receipt of the dividend income is classified as increase of temporarily restricted net assets because it is restricted for acquisition of computer but none has been spent during 2020.

b. Suggested answer: (c) 16,000

Reclassification from temporarily restricted net asset to Unrestricted net asset during 2021	20,000
Less depreciation expense of computer in 2021 (20,000/5)	4,000
Increase in unrestricted net asset in 2021	16,000

c. Suggested answer: (b) 1,100,000

Cash receipt from financing activities (1,000,000 + 100,000)	1,100,000

Note: All cash receipts with donor stipulation shall be classified in the Statement of Cash Flows as financing activities.

d. Suggested answer: (c) 20,000

Cash disbursements for investing activities	20,000

Note: All cash disbursement for acquisition of non-current asset shall be classified in the Statement of Cash Flows as investing activities.

Chapter 21

GOVERNMENT ACCOUNTING

Introduction

In order to harmonize the existing accounting standards with the international accounting standards, the Commission on Audit (COA), as a member of the International Organization of Supreme Audit Institutions (INTOSAI), through its authority under Article IX-D, Sec. 2, par. 2 of the 1987 Philippine Constitution (to promulgate accounting and auditing rules and regulations) prescribed the Government Accounting Manual (GAM) for National Government Agencies (NGA).

This manual presents the basic accounting policies and principles in accordance with Philippine Public Sectors Accounting Standards (PPSAS) adopted through COA Resolution No. 2014-003 dated January 24, 2014 and other pertinent laws, rules and regulations. It is a revision of the New Government Accounting System (NGAS) prescribed under COA Circular No. 2002-002 dated January 18, 2002; and it includes the Revised Chart of Accounts (RCA) prescribed under COA Circular No. 2013-002 dated January 30, 2013, as amended; the accounting procedures, books, registries, records, forms, reports and financial statements.

The contents of this chapter were developed based on the Government Accounting Manual mentioned above.

Government Accounting

Even under the new accounting system, government accounting is defined, pursuant to Section 109 of PD 1445, as one which "encompasses the process of analyzing, recording, classifying, summarizing and communicating all transactions involving the receipt and disposition of government fund and property and interpreting the result thereof."

Section 110, Presidential Decree 1445 sets down the following objectives of government accounting:

1. To produce information concerning past operations and present conditions;
2. To provide a basis for guidance for future operations;
3. To provide for control of the acts of public bodies and offices in the receipt, disposition and utilization of funds and property; and
4. To report on the financial position and the results of operations of government agencies for the information and guidance of all persons concerned.

Commission on Audit

The Commission on Audit (COA) keeps the general accounts of the government, promulgates accounting rules and regulations, and submits to the President and Congress, within the time fixed by law (not later than the last day of September each year – Section 41, PD 1445), an annual report of the government, its subdivisions, agencies and instrumentalities, including government-owned or controlled corporations.

In the performance of its functions, as mandated by Article IX-D, Section 2 par. (2)of the 1987 Constitution of the Philippines, to wit: "The Commission on Audit shall have exclusive authority, subject to the limitation in this Article, to define the scope of its audit and examination, establish the techniques and methods required, and promulgate accounting and auditing rules and regulations, including those for the prevention and disallowance of irregular, unnecessary, excessive, extravagant, or unconscionable expenditures, or uses of government funds and properties," the Commission on Audit revised the previous government accounting system.

Pursuant to the COA, DBM and DOF Joint Circular No. 2013-1 dated August 6, 2013, Unified Accounts Code Structures (UACS), the consistency of account classification and coding structures with the Revised Chart of Accounts shall be the responsibility of the COA.

The Department of Budget and Management

Pursuant to Section 2, Chapter 1, Title XVII, Book IV of the Administrative Code of the Philippines (EO 292), "The Department of Budget and Management shall be

responsible for the formulation and implementation of the National Budget with the goal of attaining our national socio-economic plans and objectives. The Department shall be responsible for the efficient and sound utilization of government funds and revenues to effectively achieve the country's development objectives."

The DBM is also responsible for the validation and assignment of new codes for funding source organization, sub-object codes for expenditure items, as provided by the Joint Circular No. 2013-1 dated August 6, 2013, Unified Accounts Code Structures (UACS).

The Bureau of Treasury

The Bureau of Treasury plays a pivotal role in the cash operations of the national government. Under the Revised Administrative Code, the Bureau of Treasury, as one of the operating bureaus of the Department of Finance is authorized to:

1. Receive and keep national funds, manage and control the disbursements thereof; and
2. Maintain accounts of financial transactions of all national government offices, agencies and instrumentalities.

According ~~to the~~ Joint Circular No. 2013-1 dated August 6, 2013, Unified Accounts Code Structures (UACS), the consistency of accounts classification and coding standards with the Government Finance Statistics (GFS) shall be the responsibility of DOF-BTr.

The Government Agencies

Departments, bureaus, offices and other instrumentalities of the National Government, including the Congress, the Judiciary, the Constitutional bodies, state colleges and universities, and other self-contained institutions and hospitals are required by law to have accounting units/divisions/departments, which are to be of the same level with other units/divisions/departments in the agency and under the direct supervision of the Head of the Agency. Accounting personnel shall (1.) maintain and keep current the accounts of the agency, (2.) provide advice on the financial condition and status of the appropriations and allotments of the agency as its Head may require, and (3.) to develop and conduct procedures designed to meet the needs of management. They shall perform the aforesaid duties in accordance with existing laws, rules, regulations, procedures and comply with the reporting requirements of the Commission on Audit, the Department of Finance and the

Department of Budget and Management. Failure to comply with these requirements is sufficient ground for dismissal from the government service.

BASIC ACCOUNTING STANDARDS AND POLICIES

As provided by the Government Accounting Manual for National Government Agencies, each entity shall recognize and present its financial transactions and operations in conformity of the following:

- Generally accepted government accounting principles in accordance with the Philippine Public Sector Accounting Standards (PPSAS) and pertinent laws, rules and regulations.
- Accrual basis of accounting in accordance with the PPSAS.
- Budget basis for presentation of budget information in the financial statements in accordance with PPSAS 24.
- Revised chart of accounts prescribed under COA Circular No. 2013-002 dated January 30, 2013, COA Circular No. 2014-003, and COA Circular No. 2015-007.
- Double entry bookkeeping.
- Financial statements based on accounting and budgetary records.
- Fund cluster accounting for books and fund maintenance.
- Moving average and specific identification methods for inventory costing.
- Impairment loss.
- Registries:
    - Registry of Allotments, Obligations and Disbursements (RAOD);
    - Registry of Appropriations and Allotments (RAPAL);
    - Registry of Budget, Utilization and Disbursements (RBUD);
    - Registry of Revenue and Other Receipts (RROR)
    - Registry of Allotments and Notice of Cash Allocations (RANCA);

- Registry of Allotments and Notice of Transfer of Allocation (RANTA).

ACCOUNTING FOR BUDGETARY ACCOUNTS

Accounting for budgetary accounts formally commences upon enactment of the General Appropriations Act (GAA), which contains the legal authorization to use public money for the various programs, activities and projects of the national government.

Per National Budget Circular No. 550, dated October 29, 2013, the Department of Budget and Management requires national government agencies to submit, on a regular basis, Budget Execution Documents (BEDs), which contain the agencies' targets and plans for the current year, and Budget Accountability Reports (BARs), which contain information on the agencies' actual accomplishments and performance for a given period.

Budgetary accounts consist of the following:

1. Appropriation – an authorization made by law or other legislative enactment, directing payment of goods and services out of government funds under specific conditions or for special purpose.
2. Allotment – an authorization issued by the Department of Budget and Management to the government agency, which allows it to incur obligations, for specified amounts, within the legislative appropriation.
3. Obligation – a commitment by a government agency arising from an act of duly authorized official which binds the government to the immediate or eventual payment of a sum of money.

The National Budget

The National (Government) Budget is a plan for financing the government activities for a fiscal year prepared and submitted by responsible executive to a representative body whose approval and authorization are necessary before the plan can be executed. It is a definite proposal of estimate or statement of receipts and expenditures that may be approved or rejected.

Performance-Informed Budgeting (PIB)

It is a budgeting approach that uses performance information to assist in deciding where the funds will go. This new approach to budgeting introduced by the DBM through the 2013 National Budget Memorandum No. 117, requires government agencies to strengthen the link between planning and budgeting and to simplify the presentation of budget.

Performance-informed budgeting differs from the traditional line item-based budgeting in a way that it focuses more on outputs and outcomes and places less emphasis on the inputs. It links funding to results, and provides a framework for more informed resource allocation and management. This new face of the National Budget will no longer contain an excessively detailed line item document, but a budget that presents performance information aligned to planned resources that promises to be understandable and accessible to the people because of its simplicity.

Fund Release Documents

With the adoption of the Unified Accounts Code Structures (UACS) and the Performance-Informed Budgeting (PIB), the following are the fund release documents:

1. Obligational Authority or Allotment
    a) General Appropriations Act Release Document (GAARD) – serves as the obligational authority for the comprehensive release of budgetary items appropriated in the General Appropriations Act, known as "For Comprehensive Release (FCR).

    b) Special Allotment Release Order (SARO) – covers budgetary items under "For Later Release" (FLR) in the entity submitted Budget Execution Documents (BEDs), subject to compliance of required documents/clearances; and releases of allotments for Special Purpose Funds (SPFs).

    c) General Allotment Release Order (GARO) – a comprehensive authority issued to all national government agencies to incur obligations not exceeding an authorized amount during a specified period for the purpose indicated therein. It covers automatically appropriated expenditures to agencies without need of special clearance or approval from competent authority.

2. Disbursement Authority
   a) Notice of Cash Allocation (NCA) – authority issued by the DBM to cover the cash requirements of the agencies.

   b) Non-Cash Availment Authority (NCAA) – authority issued by the DBM to cover the liquidation of agencies' actual obligations incurred against available allotments for availment of proceeds from loans/grants through supplier's credit/constructive cash.

   c) Cash Disbursement Ceiling (CDC) – authority issued by the DBM to the Department of Foreign Affairs (DFA) and Department of Labor and Employment (DOLE) to utilize their income collected/retained by their Foreign Service Posts (FSPs) to cover their operating requirements, but not to exceed the released allotment to the said post.

   d) Notice of Transfer of Allocation (NTA) – authority issued by the Central Office to its regional and operating units to cover the latter's cash requirements.

Budget Execution Documents (BEDs)

According to NBC No 555 dated October 28, 2014, Submission of Budget Execution Plans and Targets for FY 2015, all departments/agencies/operating units are mandated to prepare the BEDs based on the National Expenditure Program (NEP) of the ensuing year, without waiting for the approval of the General Appropriation Act and submit them to DBM not later than November 30 of the current year. This means that BEDs for a particular financial year shall be submitted to DBM every November 30 before that financial year. The plans, targets and schedules to be reflected in the annual BEDs will guide agencies in the early implementation of priority programs and projects. As prescribed in this circular, the following BEDs shall be submitted:

1. BED No. 1: Financial Plan (FP)
2. BED No. 2: Physical Plan (PP)
3. BED No. 3: Monthly Disbursement Program (MDP)
4. BED No. 4: Annual Procurement Plan for Common-Use Supplies and Equipment (APP-CSE)

Budget and Financial Accountability Reports (BFARs)

With the implementation of several structural reforms in 2014, such as: the adoption of the General Appropriation Act as a Release Document (GAARD), the Unified Accounts Code Structure (UACS), the Philippine Public Sector Accounting Standards (PPSAS), and the integration of the Performance-Informed Budget (PIB), there is a growing need to adapt to these innovations *vis-à-vis* the harmonized Budget and Financial Accountability Reports (BFARs), as prescribed by the DBM and COA, to effectively report, monitor and/or evaluate agency performance versus plans and targets which shall serve as basis for sound policy decisions.

According to COA and DBM Joint Circular No. 2014-1, Guidelines Prescribing the Use of Modified Formats of the Budget and Financial Accountability Reports (BFARs), dated July 2, 2014, the following reports/documents are required for submission to the DBM and COA:

1. Quarterly Physical Report of Operation (QPRO) – BAR No. 1
2. Statement of Appropriations, Allotments, Obligations, Disbursements and Balances (SAAODB) – FAR No. 1
3. Summary of Appropriations, Allotments, Obligations, Disbursements and
4. List of Allotments and Sub-Allotments (LASA) – FAR No. 1-B
5. Statement of Approved Budget, Utilizations, Disbursements and Balances (SABUDB) – FAR No. 2 (for Off-Budget Fund)
6. Summary of Approved Budget, Utilizations, Disbursements and Balances by
7. Aging of Due and Demandable Obligations (ADDO) – FAR No. 3
8. Monthly Report of Disbursements (MRD) – FAR NO. 4
9. Quarterly Report of Revenue and Other Receipts (QRROR) – FAR No. 5

Kinds of Budget

1. **As to Nature**
   a. Annual Budget – a budget which covers a period of one year. It is the basis of an annual appropriation.
   b. Supplemental Budget – a budget which supplement or adjust a previous budget which is deemed inadequate for the purpose it is intended. It is the basis for a supplemental appropriation.
   c. Special Budget – a budget of special nature and generally submitted in special forms on account that itemizations are not adequately provided in the Appropriation Act or that the amounts are not at all included in the Appropriation Act.

2. **As to Basis**
   a. Performance Budget – a budget emphasizing the program or services conducted and based on functions, activities, and projects, which focus attention upon the general character and nature of work to be done, or upon the services to be rendered.
   b. Line-Item Budget – a budget the basis of which is the objects of expenditures such as: salaries and wages, traveling expenses, freight, supplies and materials, equipment, etc.

3. **As to Approach and Technique**
   a. Zero-Based Budgeting – a process which requires systematic consideration of all programs, projects and activities with the use of define ranking procedures. In this approach, activities are analyzed and presented in "decision packages" or key budgetary inclusions.
   b. Incremental Approach – a budget where only additional requirements need justifications. It focuses analysis of incremental changes in the budget and maybe done within the context of performance and program budgeting.

Balanced Budget

It is a budget where the proposed expenditures are equal to or less than the estimated revenues. Currently, the government is operating with a budget deficiency. As such, it is serving government priorities to achieve a balanced budget by increasing revenues and cutting on expenditures.

THE BUDGET PROCESS

These four phases of the budget process/cycle overlap in continuing cycles every year. For instance, while the Executive implements the budget for the current year, it also prepares the budget for the next fiscal year or defends it before Congress. Meanwhile, the execution and accountability phases are implemented simultaneously year-round.

1. **Budget Preparation**

   The budget preparation begins with the issuance of a "budget call" by the Department of Budget and Management. The Budget Call contains budget

parameters (including macroeconomic and fiscal targets and agency budget ceilings) as set beforehand by the Development Budget Coordination Committee (DBCC); and policy guidelines and procedures in the preparation and submission of agency budget proposals. Under the new Budget Preparation Calendar, the Budget Call is issued in December, unlike in the past where it was issued in April; and the submission of the President's budget a day after the State of the Nation Address, in contrast to earlier practice where it is submitted to Congress within 30 days from the opening of every regular session.

2. Legislative Authorization (Budget Legislation)

This phase starts upon the receipt of the President's Budget by the House Speaker and ends with the President's enactment of the General Appropriation Act. The House of Representatives, in plenary, assigns the President's Budget to the House Appropriations Committee, which conduct hearing and scrutinize their respective programs and projects. It then crafts the General Appropriation Bill (GAB). In plenary session, the GAB is sponsored, presented and defended by the Appropriations Committee and Sub-Committee Chairmen. Normally, after receiving the GAB from the House of Representatives, the Senate conducts its own committee hearings and plenary deliberations on the GAB.

Once both Houses of Congress have finished their deliberations, they will each constitute a panel to the Bicameral Conference Committee. This committee will then discuss and harmonize the conflicting provisions of the House and Senate Versions of the GAB. A Harmonized Version of the GAB is thus produced; and then submitted to both Houses, which will then vote to ratify the final GAB for submission to the President. Once submitted to the President for his approval, the GAB is considered enrolled.

3. Budget Execution and Operation

This phase of budget cycle begins with DBM's issuance of guidelines on the release and utilization of funds. Agencies are required to submit their Budget Execution Documents (BEDs) at the start of budget execution. These documents outline agency plans and performance targets. These BEDs include the physical and financial plan, monthly cash program, estimate of monthly income, and list of obligations that are not yet due and demandable. The DBM set a limit for allotments issued to an agency and on the aggregate by preparing an Allotment Release Program (ARP).

4. Budget Accountability

The budget process, of course, does not end when government agencies spend public funds: each and every peso must be accounted for to ensure that is used properly, contributing to the achievement of socio-economic goals. This phase happens alongside the Budget Execution phase. Through Budget Accountability, the DBM monitors the efficiency of fund utilization, assesses agency performance and provides a vital basis for reforms and new policies.

The DBM regularly reviews the financial and physical performance of agencies. Actual utilization of funds and physical accomplishments, as indicated in the agencies' BARs, are evaluated against their targets as identified via OPIF and in the agencies' BEDs. Agency Performance Reviews (APRs) are conducted quarterly or every semester, as the case may be. An annual Budget Performance Assessment Review (BPAR) is conducted to determine each agency's accomplishments and performance by the year-end. The DBM regularly reports results to the President.

DISBURSEMENTS AND RELATED TRANSACTIONS

In a regular government agency, most of the transactions involve the receipt and disbursement of cash. The cash transactions affect every classification within the financial statements – assets, liabilities, government equity, income, and expenses. If the financial statements are to be reliable, it is essential that cash transactions are recorded correctly.

Government agencies regularly receive cash in form of Notice of Cash Allocation (NCA), which is the authority issued by the DBM to central offices, regional offices, and operating units to cover the cash requirements of the agencies. Note that the authority issued by the central office to its regional and operating units to cover the latter's cash requirements is called Notice of Transfer of Allocation (NTA).

The NCA may be used for the payment of the following types of transactions:

1. Personal Services (PS) – for payment of salaries, wages and other compensation of permanent, temporary, contractual and casual employees of the government.

2. Maintenance and Other Operating Expenses (MOOE) – expenditures to support the operations of government agencies, such as: expenses for supplies, utilities, etc.
3. Financial Expenses (FE) – a new expense category; this is for interest expense, bank charges, and other financial charges.
4. Capital Outlay (CO) – for the purchase of goods and services, the benefits of which extend beyond the fiscal year and which add to the asset of the government.
5. Other Miscellaneous Transactions – (e.g., Cash to another agency to implement a project of the agency, Guaranty deposit, Cash advances, etc.)

Modes of Disbursements

The following are the different modes of disbursements, as provided by Government Accounting Manual for National Government Agencies:

1. Disbursements by Check
    a) Modified Disbursement System Checks
    b) Commercial Checks
2. Disbursements by Cash
    a) Cash advances for Payroll
    b) Cash advances for Operating Expenses
    c) Cash advances for Travel
    d) Cash Advances for Specific Purpose/Time-Bound Undertaking
    e) Cash Advances for Petty Operating Expenses
3. Disbursements through Advice to Debit Account
4. Disbursements through Electronic Modified Disbursement System (eMDS)
5. Disbursements through Cashless Purchase Card System (CPC)
6. Disbursements through Tax Remittance Advice (eTRA)
7. Disbursements for Inter-Agency Transferred Fund (IATF)
8. Disbursements for Foreign-based Government Agencies
9. Disbursements through Direct Payment Method

INCOME COLLECTIONS AND RELATED TRANSACTIONS

Section 44 of Book VI of the 1987 Administrative Code provides for the accrual of revenue collected by the National Government to the unappropriated surplus of the general fund so that "unless otherwise specifically provided by law, all income accruing to the departments, offices, and agencies, by virtue of the provisions of existing laws, orders and regulations shall be deposited in the National Treasury or in

the duly authorized depository of the government." Provided, that amounts received in trust and from business-type activities of government may be separately recorded and disbursed in accordance with such rules and regulations as may be determined by the Permanent Committee.

SOURCES OF REVENUES AND OTHER RECEIPTS

Revenue received by National Government Agencies (NGAs) may arise from exchange and non-exchange transactions. PPSAS 23 provides that in a transaction where the entity may provide some consideration directly in return for the resources received, but that consideration does not approximate the fair value of the resources received, the entity shall determine whether there is a combination of exchange and non-exchange transactions. Each component of which is recognized separately. However, there are transactions where it is not immediately clear whether they are an exchange or a non-exchange transaction, in which cases, an examination of the substance of the transaction will determine if they are exchange or non-exchange transaction.

Revenue from Exchange Transactions

Revenues received by NGAs from exchange transactions are derived from the following:

a. Sale of goods or provisions of services to third parties or to other NGAs.
   1. Service Income
   2. Business Income

b. Use by other entity of assets yielding interest, royalties and dividends or similar distributions.
   1. Interest Income
   2. Royalties
   3. Dividends

Revenue from exchange transactions shall be measured at fair value of the consideration received or receivable. It shall be recognized when it is probable that future economic benefits or service potential will flow to the entity and these benefits can be measured reliably.

Revenue from Non-Exchange Transactions

Revenue of the NGAs from non-exchange transactions are derived mostly from taxes, gifts and donations, goods in kind and fines and penalties. Most NGAs derived revenues from transactions where they receive resources and provide no or nominal consideration directly in return.

a. Tax Revenue
    1. Tax Revenue – Individual and Corporation\
    2. Tax Revenue – Property
    3. Tax Revenue – Goods and Services
    4. Tax Revenue - Others

b. Fines and Penalties
    1. Tax Revenue
    2. Service Income
    3. Business Income

c. Shares, Grants and Donations
    1. Share from National Wealth
    2. Share from Philippine Amusement and Gaming Corporation (PAGCOR)/ Philippine Charity Sweepstakes (PCSO)
    3. Share from Earnings of GOCCs
    4. Income from Grants and Donations in Cash
    5. Income from Grants and Donations in Kind

d. The entity satisfies a present obligation recognized as a liability.
    1. Trust Liabilities
    2. Deferred Credits
    3. Unearned Revenue

The cash basis of accounting shall be applied by all government agencies in the recognition of revenue from non-exchange transactions until a reliable model of measurement of this revenue is developed. It shall be measured at the amount of the increase in net assets recognized by the entity, unless it is also required to recognize a liability. Where a liability is recognized and subsequently reduced, because the taxable event occurs or a condition is satisfied, the amount of the reduction in the liability will be recognized as revenue.

FINANCIAL STATEMENTS

The PPSAS No. 1, Presentation of Financial Statement requires the following financial statements.

1. Statement of Financial Position
2. Statement of Financial Performance
3. Statement of Changes in Net Assets/Equity
4. Statement of Cash Flows
5. Statement of Comparison of Budget and Actual Amounts
6. Notes to Financial Statements

MULTIPLE CHOICE – Theory of Accounts

TOA 21-1 (GAM)

It is the process of analyzing, recording, classifying, summarizing and communicating all transactions involving the receipt and disposition of government funds and property and interpreting the results thereof.

a. Government auditing.
b. Government budgeting
c. Government accounting
d. National government

TOA 21-2 (GAM)

What is the role of the Bureau of Treasury in relation to government accounting responsibility?

a. To receive and keep national funds and manage or control disbursements thereof.
b. To design, prepare and approve the accounting systems of government agencies.
c. To keep the general accounts of the national government.
d. To prepare the annual financial report of the national government, its instrumentalities and government-owned or controlled corporations.

TOA 21-3 (GAM)

What is the legal basis of the Commission on Audit in promulgating accounting and auditing rules and regulations?

a. PD 1445
b. Constitution of the Republic of the Philippines
c. COA Circular No. 2002-003
d. PD 1445 and the Constitution of the Republic of the Philippines

TOA 21-4 (GAM)

According to COA Cir. No. 2013-002 dated January 30, 2013, the New Government Accounting System, effective January 1, 2014, uses a standard chart of accounts with

a. Three digits
b. Four digits
c. Five digits
d. Eight digits

TOA 21-5 (GAM)

This is an authorization issued by the Department of Budget and Management to government agencies to withdraw cash from the National Treasury through the issuance of Modified Disbursement System checks or other authorized made of disbursements.

a. Allotment
b. MDS Checks
c. Notice of Cash Allocation
d. Appropriation

TOA 21-6 (GAM)

The Department of Budget and Management, Department of Finance, Bureau of Treasury, and Commission on Audit are collectively responsible for the Unified Accounts Code Structure (UACS). Who is responsible for the validation and assignment of new codes for funding source, organization, sub-object codes for expenditure items?

a. Department of Budget and Management
b. Department of Finance
c. Bureau of Treasury
d. Commission on Audit

TOA 21-7 (GAM)

The Department of Budget and Management, Department of Finance, Bureau of Treasury, and Commission on Audit are collectively responsible for the Unified Accounts Code Structure (UACS). Who is responsible for the consistency of account classification and coding structure with the Revised Chart of Accounts?

a. Department of Budget and Management
b. Department of Finance
c. Bureau of Treasury
d. Commission on Audit

TOA 21-8 (GAM)

The Department of Budget and Management, Department of Finance, Bureau of Treasury, and Commission on Audit are collectively responsible for the Unified Accounts Code Structure (UACS). Who is responsible for the consistency of account classification and coding standards with the Government Finance Statistics?

a. Department of Budget and Management
b. Department of Finance – Bureau of Treasury
c. Commission on Audit
d. All of them are responsible.

TOA 21-9 (GAM)

Its function is to assist the Commission on Audit in formulating and implementing Philippine Public Sector Accounting Standards.

a. Board of Accountancy
b. Philippine Institute of Certified Public Accountants
c. Public Sector Accounting Standards Board
d. Philippine Accounting Standards Committee

TOA 21-10 (GAM)

It refers to an accounting entity for recording expenditures and revenue associated with a specific activity for which accounting records are maintained and periodic reports are prepared.

a. Financial accounting and reporting
b. Public sector accounting and reporting
c. Fund cluster accounting
d. Responsibility accounting

TOA 21-11 (GAM)

It is an integrated group of activities that contributes to an agency or department's continuing objective.

a. Major Final Output (MFO)
b. Program
c. Activity
d. Project

TOA 21-12 (GAM)

It is the fund available for any purpose that Congress may choose to apply and composed of all receipts or revenues that do not otherwise accrue to other funds.

a. Custodial fund
b. General fund
c. Off-budgetary fund
d. Revolving fund

TOA 21-13 (GAM)

It is the system of prescribing the procedures for recording appropriations, allotments and obligations.

a. Fund accounting
b. Budgetary accounting
c. Obligation accounting
d. Government accounting

TOA 21-14 (GAM)

As specifically provided for in the New Constitution, no money shall be paid out of the National Treasury EXCEPT in the pursuance of

a. Budget
b. President's executive order
c. Fund
d. Appropriation

TOA 21-15 (GAM)

Its main concern is the availability and use of funds for public services.

a. Commission on Audit
b. Department of Finance
c. Bureau of Treasury
d. National Budgetary System

TOA 21-16 (GAM)

It is a statement of estimated receipts and estimated expenses of the government, which serves as basis for a General Appropriation Act.

a. Statement of financial position
b. Statement of operations

c. National government budget
d. Local government budget

TOA 21-17 (GAM)

Which department prepares the national budget, which serves as the basis of the General Appropriation Act?

a. Executive Department
b. Legislative Department
c. Judiciary Department
d. National Government Agencies/units

TOA 21-18 (GAM)

It is the legislative consideration, review and approval of the national budget.

a. Preparation
b. Authorization
c. Execution
d. Accountability

TOA 21-19 (GAM)

It is the implementation of the national budget by different departments and release of allotments.

a. Budget preparation
b. Budget authorization
c. Budget execution
d. Budget accountability

TOA 21-20 (GAM)

The budgetary accounts in government accounting is consist of the following:

a. Allotment, obligation, and liquidation.
b. Appropriation, liquidation, and Notice of Cash Allocation.
c. Appropriation, allotment, and obligation.
d. Allotment, liquidation, and Notice of Cash Allocation.

TOA 21-21 (GAM)

It is the formal document issued by the Department of Budget and Management to the head of the agency containing the authorization, conditions and amount of allocation.

a. Special Allotment Release Order
b. Allotment and Obligation Slip
c. Notice of Cash Allocation
d. Registry of Allotment and Obligation

TOA 21-22 (GAM)

It is a budget where the proposed expenditures are equal to or less than the estimated revenues.

a. Annual budget
b. Supplemental budget
c. Balanced budget
d. Line-item budget

TOA 21-23 (GAM)

It is a budgeting approach that uses performance information to assist in deciding where the funds will go.

a. Performance-Informed budgeting
b. Zero-based budgeting
c. Performance-based budgeting
d. Line-item budgeting

TOA 21-24 (GAM)

It is a phase of budget cycle that starts upon the receipt of the President's budget by the House Speaker and ends with the President's enactment of the General Appropriations Act.

a. Budget preparation
b. Budget legislation
c. Budget execution and operation
d. Budget accountability

TOA 21-25 (GAM)

A budget of special nature and generally submitted in special forms on account that itemizations are not adequately provided in the Appropriations Act or that the amount are not at all included in the Appropriations Act.

a. Annual budget
b. Special budget
c. Line-item budget
d. Supplemental budget

TOA 21-26 (GAM)

It is the legislative authorization to make payments out of government funds under specified conditions and specific purposes.

a. Appropriation
b. Allotment
c. Obligation
d. Budgeting

TOA 21-27 (GAM)

It is the authorization from the Department of Budget and Management to an agency to incur obligation up to a specified amount that must be within the legislative appropriation.

a. Obligation
b. Appropriation
c. Allotment
d. Fund release

TOA 21-28 (GAM)

It is the amount committed to be paid by the government arising from an act of a duly authorized administrative officer and which binds the government to the immediate and eventual payment of money.

a. Obligation
b. Appropriation
c. Allotment
d. Commitment

TOA 21-29 (GAM)

It is a disbursement authority representing Modified Disbursement Checks issued and direct payments to external creditors per validated advice to debit account in the list of due and demandable accounts payable.

a. Tax Remittance Advice (TRA)
b. Notice of Cash Allocation (NCA)
c. Non-Cash Availment Authority (NCAA)
d. Cash disbursement Ceiling (CDC)

TOA 21-30 (GAM)

This specifies the maximum amount of withdrawal that an entity can make from a government bank for the period indicated.

a. Notice of Cash Allocation
b. Appropriation
c. Allotment
d. Notice of Transfer of Allocation

TOA 21-31 (GAM)

This shall be the authority of the regional and operating units to pay their operating expenses, purchases of supplies and materials, acquisition of PPE, accounts payable, and other authorized disbursements through the issue of MDS checks, ADA or other modes of disbursements.

a. Notice of Cash Allocation
b. Appropriation
c. Allotment
d. Notice of Transfer of Allocation

TOA 21-32 (GAM)

It serves as the covering letter in transmitting the agency's financial statements to the Commission on Audit, Department of Budget and Management, and other oversight agencies and parties.

a. Pre-closing trial balance
b. Post-closing trial balance
c. Statement of management responsibility
d. Notes to financial statements

TOA 21-33 (GAM)

This is also termed as the Adjusted Trial Balance.

a. Trial Balance
b. Pre-Closing Trial Balance
c. Post-Closing Trial Balance
d. None of the above

MULTIPLE CHOICE – Problems

PROB. 21-1 (GAM)

The journal entry to be made in the books of government agencies/units upon receipt of Notice of Cash Allocation is

a. Cash – MDS, Regular
   Subsidy from National Government
b. Cash in Bank – Local Currency, Current Account
   Subsidy from National Government
c. Cash in Bank – Local Currency, Savings Account
   Subsidy from National Government
d. Cash in Bank – Local Currency, Time Deposit
   Subsidy from National Government

PROB. 21-2 (GAM)

Agency X received Maintenance and Other Operating Expenses (MOOE) allotment directly from Department of Budget and Management in the amount of P10,000,000 with Notice of Cash Allocation (NCA) of P6,000,000. Under the new system, what is the journal entry to record the receipt of allotment?

a.	National clearing account - CDC	10,000,000	
	Appropriation allotted		10,000,000
b.	National clearing account - AA	10,000,000	
	Appropriation allotted		10,000,000
c.	National clearing account	10,000,000	
	Appropriation allotted		10,000,000

d. Memo entry only in the registry

PROB. 21-3 (GAM)

Agency X received Maintenance and Other Operating Expenses (MOOE) allotment directly from Department of Budget and Management in the amount of P10,000,000 with Notice of Cash Allocation (NCA) of P6,000,000. Under the new system, what is the journal entry to record the receipt of Notice of Cash Allocation?

a.	CDC	6,000,000	
	Appropriation allotted		6,000,000

b.	Cash – National treasury MDS	6,000,000	
	Appropriation allotted		6,000,000
c.	Cash – MDS, Regular	6,000,000	
	Subsidy from National Govt.		6,000,000
d.	Memo entry only in the registry		

PROB 21-4 (GAM)

At the end of a calendar year, the books of Agency X showed a lapsed regular Notice of Cash Allocation (NCA). What is the journal entry to record reversion of this lapsed NCA to the National Treasury?

a.	Subsidy from National Government	xxx	
	Cash-Modified Disbursement System, Regular		xxx
b.	Subsidy from National Government	xxx	
	Cash-Treasury/Agent Deposit, Regular		xxx
c.	Cash-Local Currency, Banko Sentral ng Pilipinas	xxx	
	Cash-Modified Disbursement System, Regular		xxx
d.	Cash-Treasury/Agent Deposit, Regular	xxx	
	Cash-Modified Disbursement System, Regular		xxx

PROB. 21-5 (GAM)

Agency ABC is a national government agency. During the year, Agency ABC incurred obligations in the amount of P5,000,000, of which P3,000,000 were for the purchase of equipment. Under the new system, what is the journal entry to record obligation incurred?

a.	Appropriation allotted	5,000,000	
	Obligation incurred		5,000,000
	Equipment – In transit	3,000,000	
	Invested surplus - purchase		3,000,000
b.	Appropriation allotted	5,000,000	
	Obligation incurred		5,000,000
	Equipment – In transit	5,000,000	
	Invested surplus - purchase		5,000,000
c.	Appropriation allotted	5,000,000	
	Obligation incurred		5,000,000
d.	Memo entry only in the registry		

PROB. 21-6 (GAM)

Bureau X acquired an equipment costing P100,000, which was appropriately recorded in Registry of Allotment and Obligations – Capital Outlay. Upon delivery, a check was issued for payment and a ten percent tax was withheld. What is the journal entry to record this payment under the new system?

a.	Obligation liquidated	90,000	
	Cash – MDS, Regular		90,000
b.	Obligation liquidated	100,000	
	Withholding tax payable		10,000
	Cash – MDS, Regular		90,000
	Equipment – GPS	100,000	
	Equipment – In transit		100,000
c.	Equipment	100,000	
	Cash – MDS, Regular		90,000
	Withholding tax payable		10,000
d.	Memo entry only in the registry		

PROB. 21-7 (GAM)

Which of the following entry is NOT used to recognize the receipt of NCA?

a.	Cash – MDS, Regular	xxx	
	Subsidy from National Government		xxx
b.	Cash – MDS, Special Account	xxx	
	Cash – Treasury/Agency Deposit, Special Account		xxx
c.	Cash – MDS, Trust	xxx	
	Subsidy from National Government		xxx
d.	Cash – MDS, Trust	xxx	
	Cash – Treasury/Agency Deposit, Trust		xxx

PROB. 21-8 (GAM)

The Regular Disbursing Officer of Agency X, a national government agency, liquidated the cash advance for payroll of the agency's regular employees in the amount of P102,500. The liquidation was appropriately recognized based on the Report of Cash Disbursements and other supporting documents.

What is the journal entry to record, in the books of the government agency, the above liquidation of cash advance for payroll?

a.	Due to officers and employees	102,500	
	Advances for payroll		102,500
b.	Due from disbursing officer	102,500	
	Advances for payroll		102,500
c.	Salaries and wages - Regular	102,500	
	Advances for payroll		102,500
d.	Salaries and wages - Regular	102,500	
	Advances to disbursing officer		102,500

PROB. 21-9 (GAM)

At the beginning of the 1st quarter of the current year, the Department of Budget and Management issued Notice of Cash Allocation (NCA) to Agency ABC, a national government agency, for special Modified Disbursement System (MDS) accounts for payment of retirement gratuity leave benefits in the amount of P500,000. What is the journal entry to recognize receipt of NCA for special account in the general fund?

a.	Cash – MDS, Special Account	500,000	
	Cash – Treasury/Agency Deposit, Special Acct.		500,000
b.	Cash – MDS, Special Account	500,000	
	Subsidy from National Government		500,000
c.	Cash – Treasury/Agency Deposit, Special Account	500,000	
	Cash – MDS, Special Account		500,000
d.	Cash – Treasury/Agency Deposit, Special Account	500,000	
	Subsidy from National Government		500,000

PROB. 21-10 (GAM)

Bureau X, a national government agency, purchased office equipment in the amount of P1,000,000 through Direct Payment Scheme of foreign loan availment. Accordingly, a liability was set-up. The corresponding Non-Cash Availment Authority (NCAA) was received from the Department of Budget and Management and payment was made through Direct Payment Scheme.

What is the journal entry to record receipt of the NCAA from the above transaction?

a.	Accounts payable	1,000,000	
	Cash in bank – Foreign Currency, Current		1,000,000
b.	Accounts payable	1,000,000	
	Cash – MDS, Regular		1,000,000
c.	Cash – MDS, Regular	1,000,000	
	Subsidy from national government		1,000,000
d.	Accounts payable	1,000,000	
	Subsidy from national government		1,000,000

PROB. 21-11 (NGAS)

As amended (per COA Circular No. 2007-001 dated January 19, 2007), what is the journal entry to record cash advances by Disbursing Officer for salaries and wages?

a.	Advance for Payroll	xxx	
	Cash – MDS, Regular		xxx
b.	Cash – Disbursing officer	xxx	
	Cash – National Treasury, MDS		xxx
c.	Cash – Disbursing officer	xxx	
	Payroll fund		xxx
d.	Payroll fund	xxx	
	Cash – Disbursing officer		xxx

PROB. 21-12 (GAM)

The Notice of Cash Allocation (NCA) released comprehensively to Agency ABC on January 15, 2019 are as follows:

January	P 2,000,000
February	2,000,000
March	2,000,000
April	3,000,000
May	6,000,000
June	2,000,000

The balance of unutilized NCA for April is P500,000 and May is P300,000. How much is the balance of Notice of Cash Allocation (NCA) to be reflected in the books of Agency ABC at May 31, 2019?

a. 800,000
b. 500,000
c. 300,000
d. 0

ANSWERS – Theory of Accounts

TOA 21-1 *Suggested answer (c)Government Accounting*

TOA 21-2 *Suggested answer (a)To receive and keep national funds and manage or control disbursements thereof.*

TOA 21-3 *Suggested answer (b) Constitution of the Republic of the Philippines*

TOA 21-4 *Suggested answer (d) Eight digits*

TOA 21-5 *Suggested answer (c) Notice of Cash Allocation*

TOA 21-6 *Suggested answer (a) Department of Budget and Management*

TOA 21-7 *Suggested answer (d) Commission on Audit*

TOA 21-8 *Suggested answer (b) Department of Finance – Bureau of Treasury*

TOA 21-9 *Suggested answer (c) Public Sector Accounting Standards Board*

TOA 21-10 *Suggested answer (c) Fund cluster accounting*

TOA 21-11 *Suggested answer (b) Program*

TOA 21-12 *Suggested answer (b) General fund*

TOA 21-13 *Suggested answer (b) Budgetary accounting*

TOA 21-14 *Suggested answer (d) Appropriation*

TOA 21-15 *Suggested answer (d) National Budgetary System*

TOA 21-16 *Suggested answer (c) National government budget*

TOA 21-17 *Suggested answer (a) Executive Department*

TOA 21-18 *Suggested answer (b) Authorization*

TOA 21-19 *Suggested answer (c) Budget execution.*

TOA 21-20 *Suggested answer (c) Appropriation, Allotment, and Obligation*

TOA 21-21 *Suggested answer (a) Special Allotment Release Order*

TOA 21-22 *Suggested answer (c) Balanced budget*

TOA 21-23 *Suggested answer (a) Performance-Informed budgeting*

TOA 21-24 *Suggested answer (b) Budget legislation*

TOA 21-25 *Suggested answer (b) Special budget*

TOA 21-26 *Suggested answer (a) Appropriation*

TOA 21-27 *Suggested answer (c) Allotment*

TOA 21-28 *Suggested answer (a) Obligation*

TOA 21-29 *Suggested answer (b) Notice of Cash Allocation (NCA)*

TOA 21-30 *Suggested answer (a) Notice of Cash Allocation*

TOA 21-31 *Suggested answer (d) Notice of Transfer of Allocation*

TOA 21-32 *Suggested answer (c) Statement of Management Responsibility*

TOA 21-33 *Suggested answer (b) Pre-closing trial balance*

MULTIPLE CHOICE - Problems

PROB. 21-1 *Suggested answer (a) DR: Cash – MDS, Regular*
CR: Subsidy from National Government

Notice of cash allocation is the authority issued by the DBM to central, regional, and provincial offices and operating units to pay operating expenses and other authorized disbursements through the issue of Modified Disbursements System (MDS) checks, Authority to Debit Account (ADA) or other modes of disbursement representing Subsidy from National government.

PROB. 21-2 *Suggested answer (d) Memo entry only in the registry*

Under the new system, the agency shall no longer journalize its appropriation and allotments. The recording shall be in form of memorandum entry only in the Registry of Allotment, Obligations and Disbursement (RAOD). Since the allotment received is Maintenance and Other Operating Expenses (MOOE), the recording shall be in Registry of Allotments, Obligations, and Disbursements – Maintenance and Other Operating Expenses (RAOD-MOOE).

PROB. 21-3 *Suggested answer (c) DR: Cash – MDS, Regular 6,000,000*
CR: Subsidy from National Gov't 6,000,000

All cash allocated for the agency whether in form of the Notice of Cash Allocation or in the Tax Remittance Advice (TRA) or other forms or manner of release shall be journalized by the agency by debiting the appropriate account and crediting subsidy from national government.

Whether a separate NCA is received for current year obligations or a different one for prior year/s obligations, the NCA received is recorded as Cash-MDS, Regular and Subsidy from National Government. This entry shows that the NCA received is the share of the agency in the income of the National Government and is a proof that there is cash allocated for the agency by the National Treasurer.

PROB. 21-4 *Suggested Answer (a) DR: Subsidy from national government xxx*
CR: Cash – MDS, Regular xxx

Sec. 55, Chapter 19, Government Accounting Manual states that for national government agencies receiving subsidies from the national government in form of NCA, adjusting entry shall be made for the reversion of the unused NCA at the end of the period.

COA Circular No. 2013-002 dated January 30, 2013, Description of Accounts, provides that Cash-Modified Disbursement System, Regular is credited for the reversion of lapsed regular NCA with corresponding debit to Subsidy from National Government account.

PROB. 21-5 *Suggested answer (d) Memo entry only in the registry*

Although the agency will not journalize its appropriation and allotments, it shall maintain four registries for the allotments it receives and for the obligations it incurs. The recording is in form of memo entry. In addition, corollary journal entries shall no longer be used in the new accounting system. Acquisition of inventory, fixed assets and other assets shall be recognized as capital expenditures in the regular books of accounts, negating the need for corollary journal entries.

PROB. 21–6 *Suggested answer (c) DR: Cash – MDS, Trust*
CR: Subsidy from National Government

The appropriate journal entry to record the receipt of NCA for Trust Receipt Fund is: DR: Cash – MDS, Trust and CR: Cash – Treasury/Agency Deposit, Trust. Thus, journal entry (c) is incorrect and not used to recognized receipt of NCA for Trust Receipt Fund.

PROB. 21–7 *Suggested answer (a)*
DR: Cash – MDS, Special Account 500,000
CR: Cash – Treasury/Agency Deposit, Special Account. 500,000

Cash – MDS, Special Account, when debited, is used to recognized in the agency books the NCA received for Special Account in the General Fund (SAGF). This account is then credited upon issuance of MDS checks and reversion of any unutilized balance of lapsed NCA with corresponding debit to Subsidy from National Government account.

Cash – Treasury/Deposit, Special Account is credited to recognize receipt of NCA; and debited in the agency books to recognize the amount of collections remitted to the Bureau of Treasury under SAGF.

PROB. 21–8 *Suggested answer (d)*

DR: Accounts Payable	1,000,000	
CR: Subsidy from NG		1,000,000

The Non-Cash Availment Authority (NCAA) is an authority issued by the DBM to agencies to cover the liquidation of their actual obligations incurred against available allotments for availment of proceeds from loans/grants through supplier's credit/constructive cash. NCAA is used to cover the disbursements through Direct Payment method. This mode of disbursement is made through journal entry voucher issued by the Bureau of Treasury to the availing/implementing agency to record payment of goods and services made directly by the lending institution to the supplier or contractor.

The account Subsidy from National Government is used to recognize, among others, the constructive receipt of NCAA for advanced payments made by foreign creditors and donors.

PROB. 21-9 *Suggested answer (d) 0*

Any unutilized NCA at the end of the month shall automatically lapse and reverted to the National Treasury; thus, no amount of which shall be reflected in the books of any government agency at the end of any month.

PROB. 21-10 *Suggested answer (c)*

DR: Equipment	100,000	
CR: Cash-MDS, Regular		90,000
CR: Withholding tax payable		10,000

Fixed assets are charged against capital outlay. PPSAS 17 provides that property, plant and equipment shall initially be recognized at cost plus all costs incurred in bringing the asset to the location necessary for its intended use. In this situation no Tax Remittance Advice was mentioned, thus disregarded in the journal entry.

PROB. 21–11 *Suggested answer (a)*

DR: Due to officers and employees	*102,500*	
CR: Advances for payroll		*102,500*

The account Due to Officers and Employees was set-up (credited) when the salaries and wages, net of any deductions, was recognized. And when the cash advances for payroll was granted Advances for Payroll account was recognized (debited). Accordingly, upon liquidation, these accounts were eliminated as shown above.

PROB. 21-12 *Suggested answer (a)*

DR: Advance for Payroll	*xxx*	
CR: Cash – MDS, Regular		*xxx*

The account Payroll Fund is no longer included in the Revised Chart of Accounts in COA Circular No. 2013-002 dated January 30, 2013, instead Advances for Payroll account was introduced. This account is debited for the amount granted to regular disbursing officer for payment of salaries, wages, honoraries, allowances and other personnel benefits.

AFAR Mock Board - Number One

1. Which of the following gain or loss on changes in the value of derivates shall be presented in other comprehensive income with reclassification adjustment to profit or loss if already realized?
    a. Gain or loss on changes of intrinsic value of derivates classified as undesignated hedge
    b. Gain or loss on changes of value of derivates designated as cash flow hedge arising from its ineffective portion
    c. Gain or loss on changes of value of derivatives designated as hedge of net investment in foreign operation arising from its effective portion
    d. Gain or loss on changes of time value of derivatives designated as fair value hedge

2. Under PAS 21, what is the accounting treatment of exchange differences arising from translating financial statement in entity's functional currency into entity's presentation currency?
    a. It shall be presented and recognized in other comprehensive income with reclassification adjustment to profit or loss.
    b. It shall be presented and recognized in other comprehensive income without reclassification adjustment to profit or loss.
    c. It shall be presented and recognized in profit or loss.
    d. It shall be presented and recognized as change in accounting policy in statement of changes in equity.

3. Which of the following cash flows shall be classified as part of operating activities in the Statement of Cash Flows of a nonprofit organization?
    a. Cash payment for the acquisition of service bus of the organization
    b. Cash receipt from sale of souvenir items of the organization
    c. Cash payment for the matured loans payable of the organization
    d. Cash receipt from donor who restricted the fund for research project of the organization

4. This phase in the national government budgetary process involves the enactment of the General Appropriations Act by the Congress of the Philippines based on the proposed national budget submitted by the President of the Republic of the Philippines.
   a. Budget Preparation
   b. Budget Legislation
   c. Budget Execution
   d. Budget Accountability

5. When will the equivalent unit of production computed for direct materials under FIFO Process be always the same with the equivalent unit of production computed for direct materials under Average Process in case Work in Process Inventory Beginning is present?
   a. When all direct materials are added at the start of the production process
   b. When direct materials are added evenly throughout the production process
   c. When all direct materials are added at the middle of the production process
   d. When all direct materials are added at the end of the production process

6. If the Parent Corporation accounts its Investment in Subsidiary using cost method in its separate financial statements, which income item will appear in its separate statement of comprehensive income?
   a. Gain on bargain purchase in case the fair value of net assets acquired is higher than the fair value of the consideration given up for the acquisition of the investment in subsidiary
   b. Dividend income from subsidiary when its right to receive dividend is established through declaration by the board of directors of its subsidiary
   c. Investment income or share in adjusted net income of its subsidiary
   d. Gain on changes in fair value of investment in subsidiary

7. Under PFRS 3, what is the accounting treatment when an acquirer obtains control of a business?

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   c. Investment income or share in adjusted net income of its subsidiary
   d. Gain on changes in fair value of investment in subsidiary

7. Under PFRS 3, what is the accounting treatment when an acquirer obtains control of a business?

a. It shall be accounted for using cost method.
b. It shall be accounted for using pooling of interest method.
c. It shall be accounted for using equity method.
d. It shall be accounted for using acquisition method.

8. Under PAS 21, when translating foreign current denominated asset into entity's functional currency, what is the exchange rate to be used for translating investment property accounted for using cost model at each subsequent statement of financial position date?
   a. Exchange rate at the date of transaction a.k.a. historical rate
   b. Exchange rate at the end of reporting period a.k.a. closing rate
   c. Exchange rate that existed when the fair values were determined
   d. Average exchange rate for each year

9. Which of the following credits shall be settled first by the corporate liquidator in the winding up of the affairs of a dissolved corporation?
   a. Book value per share for the common stockholders of the dissolved corporation
   b. Liquidation value per share for the preferred stockholders of the dissolved corporation
   c. Redemption value of the stocks for the redeemable preferred stockholders of the dissolved corporation
   d. Claims of the creditors of the dissolved corporation

10. If a retiring partner receives more than his adjusted capital balance before retirement, what is the logical reason if the capital balances of the remaining partner decrease after the said retirement?
   a. Bonus is given by remaining partners to retiring partner
   b. Bonus is given by retiring partner to remaining partners
   c. Goodwill arising from retirement of a partner is recognized.
   d. Impairment loss of an existing asset is recognized at the time of retirement.

11. Which of the following will increase the cost of goods sold during the year?
   a. Increase in the salaries of inventory accountant during the year

b. Decrease in finished goods inventory during the year
c. Increase in work in process inventory during the year
d. Decrease in purchases of direct materials during the year

12. Entity A and Entity B incorporated Entity C. The contractual agreement of the incorporating entities provides that decisions about the relevant activities of Entity require the unanimous consent of Entity A and Entity B. The contractual agreement provides that Entity A and Entity B have rights to the assets, and obligations for the liabilities, relating to Entity C. How shall Entity A and Entity B account their interests in Entity C?
    a. They shall be accounted for as Investment in Associate using Equity Method under PAS 28.
    b. They shall be accounted for as joint operation under PFRS 11.
    c. They shall be accounted for as Investment in Joint Venture using Equity Method under PFRS 11 in relation to PAS 28.
    d. They shall be accounted for using acquisition method under PFRS 3 and PFRS 10.

13. Which of the following transactions will result to credit to home office account in the book of the branch?
    a. Collection by the branch of its own receivable
    b. Net loss reported by the branch
    c. Payment by the home office of the payable of the branch
    d. Return by the branch of merchandise coming from the home office

14. The Republic of the Philippines contracted with a SLEX Incorporated to develop, operate and maintain the grantor's skyway connecting North Luzon Expressway and South Luzon Expressway. SLEX Incorporated has received the license or right to charge users of the skyway that it constructs and then must operate and maintain for a period of 50 years. How shall SLEX Incorporated account its interest in the said skyway?
    a. It shall be accounted under PAS 38: Intangible Asset.
    b. It shall be accounted under PFRS 9: Financial Asset classified as debt instrument.

c. It shall be accounted under PAS 16: Property, Plant and Equipment.
d. It shall be accounted under PAS 40: Investment Property.

15. The entity reported a net unfavorable direct labor variance. If the standard direct labor hours to be rendered are higher than the direct labor hours actually rendered, which is correct?
    a. The actual direct labor cost is lower than the standard direct labor cost.
    b. The standard direct labor rate is lower than the actual direct labor rate.
    c. The amount debited to work in process is higher to the amounted credited to salaries payable.
    d. The entity debited labor efficiency variance and credited labor rate variance.

16. Under PFRS 15, when shall entity recognize revenue from contract with customers?
    a. When it is probable that future economic benefits will flow to the entity and the fair value of the revenue can be measured reliably.
    b. When the entity has already collected the consideration from revenue from contract with customers.
    c. When or as the entity satisfies a performance obligation.
    d. When the entity becomes a party to a contract.

17. When will the balance of construction in progress computed under cost recovery method be higher than the balance of construction in progress computed under percentage of completion method?
    a. In the year when the estimated contract price is lower than the estimated total construction cost.
    b. In the year when the entity reported realized gross profit under cost recovery method.
    c. In the year when entity reported realized gross loss under percentage of completion method.
    d. Such scenario will never happen throughout the lifetime of the project.

18. What is the accounting treatment to the excess of the net installment receivable (installment receivable minus deferred gross profit) over the fair value of the repossessed inventory at the date of the repossession of inventory due to the default of the installment balance?
    a. Deferred gain on repossession classified as liability
    b. Loss on repossession as part of profit or loss
    c. Deferred loss on repossession as part of other comprehensive income
    d. Gain on repossession as part of other comprehensive income

19. Under PFRS 3, what is the accounting treatment of the costs related to the acquisition by the acquirer of the acquiree such as finder's fee, professional fees, consulting fees and general administrative cost?
    a. They shall be expensed as incurred.
    b. They shall form part of the consideration given up in the business combination.
    c. They shall be debited to share premium.
    d. They shall be charged to goodwill or gain on bargain purchase arising from business combination.

20. Under PFRS 15, what is measurement basis of revenue from contract with customers?
    a. Historical cost of the consideration received or receivable
    b. Book value of the consideration received or receivable
    c. Fair value of the consideration received or receivable
    d. Recoverable amount of the consideration received or receivable

21. Which of the following transactions will increase the cost of goods manufactured for the year ended?
    a. Decrease in work in process inventory for the year ended
    b. Decrease in total manufacturing costs for the year ended
    c. Decrease in finished goods inventory for the year ended
    d. Decrease in conversion cost for the year ended

22. In the liquidation of general partnership, which of the following claims shall be settled first by the liquidating partner?
    a. Capital contribution by the managing partner
    b. Share in profit by the industrial partner
    c. Employee benefits of workers
    d. Advances made by capitalist partner to the partnership

23. In what year will the balance of construction in progress under percentage of completion method be certainly equal to the balance of construction in progress under cost recovery method?
    a. In the year when the entity recognizes realized gross loss under percentage of completion method.
    b. In the year when the entity recognizes realized gross loss under cost recovery method.
    c. In the year when the entity recognizes realized gross profit under percentage of completion method.
    d. In the year when the entity recognizes realized gross profit under cost recovery method.

24. In the liquidation of a stock corporation, which of the following claims shall be settled last by the corporate liquidator?
    a. Capital contribution by preferred stockholders
    b. Unsecured liability to corporate suppliers
    c. Income tax liability of the corporation
    d. Investment of ordinary shareholders

25. Under PFRS 15, when shall an entity recognize revenue from contracts with customers?
    a. When the entity becomes a party to a contract.
    b. When it is probable that any future economic benefit associate with the item of revenue will flow to the entity and the amount of revenue can be measured reliably.
    c. When (or as) the entity satisfies a performance obligation.
    d. When the entity receives the cash consideration.

26. Which of the following transactions will result to debit in Investment in Pasig branch account in the home office's book?

a. Collection of Panig branch's receivable by Pasig Branch
b. Net income reported by Panig branch
c. Payment by Pasig Branch of Panig branch's payable
d. Credit memo received by home office from Panig branch

27. What is the reason for the understatement in the branch's reported net income in its separate income statement as compared to the branch's true net income reported in the entity's combined income statement?
    a. Overstatement of the branch's ending inventory coming from the home office
    b. Overstatement of the branch's reported shipment from home office
    c. Overstatement of the branch's beginning inventory coming from the home office
    d. Overstatement of the branch's reported cost of sales for goods coming from home office

28. Which of the following costs is common to both prime costs and conversion costs?
    a. Freight in, insurance in transit and handling costs of the main material of the product
    b. Wage of the factory workers
    c. Salary of the inventory accountant
    d. Depreciation of the factory building and factory equipment

29. Under PFRS 15, when shall a consignor recognize revenue from consignment sales?
    a. When the consignor delivers the consigned goods to the consignee.
    b. When the consignor and consignee enter into a contract.
    c. When the consignee actually remits to the consignor the net proceeds from the sale of consigned goods to third persons.
    d. When the consignee sells and delivers the consigned goods to third persons.

30. A partners retires from the partners and receives an amount higher than his capital balance at the time of his retirement. Under Philippine

GAAP, which of the following explanation is valid if the capital balances of the remaining partners increase after such retirement?

a. Bonus has been given by the retiring partner to the remaining partners.
b. Asset revaluation has been recognized at the time of retirement.
c. Goodwill arising from partner's retirement has been recognized.
d. Bonus has been given by remaining partners to retiring partner.

31. Under PFRS 15, which of the criteria will justify an entity to recognize revenue from contract with customers over a period of time?

a. When the entity's performance creates or enhances an asset that the customer controls as the asset is created.
b. When the entity has transferred physical possession of the asset which is the subject matter of the performance obligation.
c. When the customer acquires the significant risks and rewards related to the ownership of the asset upon full payment of the price.
d. When the customer obtains legal title to the asset upon the execution of the formality required by law.

32. Under Philippine GAAP, what is the proper classification in the financial statement of deferred gross profit account resulting from the application of installment method of revenue recognition of installment sales?

a. Unearned revenue account in the liability section of Statement of Financial Position
b. Contra-account to installment receivable in the asset section of Statement of Financial Position
c. Revenue account in the income section of Income Statement
d. Loss in the expense section of Income Statement

33. If the collection of the long-term note received as consideration for initial services rendered by Franchisor to Franchisee is unlikely but not remote, what method shall be used by the franchisor to recognize gross profit from initial franchise fee revenue?

a. Accrual basis

b. Cost recovery method
c. Installment method
d. Percentage of completion method

34. Under Normal Costing, material or significant over-application/under-application of factory overhead shall be closed to
    a. Cost of goods sold only.
    b. Proportionately to ending finished goods and cost of goods sold.
    c. Proportionately to ending work in process, ending finished goods and cost of goods sold.
    d. Proportionately to ending raw materials, ending work in process, ending finished goods and cost of goods sold.

35. In the absence of profit agreement, how shall the profits of the partnership be distributed to capitalist partners assuming there is no industrial partner?
    a. It shall be divided in accordance with the loss agreement ratio.
    b. It shall be divided in accordance with capital contribution ratio.
    c. It shall be divided equally.
    d. It shall be forfeited in favor of the state.

36. What cost accounting system is ideal for just in time production system?
    a. Actual costing system
    b. Normal costing system
    c. Standard costing system
    d. Flexible costing system

37. If the net realizable value of the by-product resulting from joint production is material or significant, how shall the entity account the net realizable value of the by-product?
    a. It shall be presented as other income.
    b. It shall be deducted from the total manufacturing cost of main products.
    c. It shall be added to the sales revenue of main products.

d. It shall be deducted from the costs of goods sold of main products.

38. At the time of corporate liquidation, the preferred stockholders were not able to receive anything. Which corporate creditors were certainly paid in full in the absence of other data?
    I. Fully secured creditors
    II. Partially secured creditors
    III. Unsecured creditors with priority
    IV. Unsecured creditors without priority
    a. I only
    b. I and III only
    c. I, II and III only
    d. I, II, III and IV

39. What shall be the proper basis for the computation of direct material price variance for the period ended?
    a. Actual direct materials used for the period ended.
    b. Actual direct materials at the beginning of the period.
    c. Actual direct materials at the end of the period.
    d. Actual direct materials purchased for the period ended.

40. In the absence of other relevant data, when a new partner is admitted in an existing partnership through the acquisition of capital interest of incumbent partners, which is always true?
    a. The partnership shall recognize gain or loss as a result of the disposal of capital interest.
    b. The total capital of the partnership will not change despite the admission of a new partner.
    c. The total assets of the partnership will increase by the amount of the net proceeds of the disposal of capital interest.
    d. The partnership shall recognize goodwill arising from the admission of a new partner.

41. On January 1, 2020, A, B and C formed ABC Partnership upon contribution of land, building and cash respectively whereby C will have 20% capital interest in the partnership. On the date of partnership

formation, the building is subject to a mortgage payable to be assumed by the partnership amounting to P30,000. On the same date, the building has book value of P230,000 and fair value of P150,000. On the other hand, the land has cost of P200,000 and assessed value of P360,000. On January 2, 2020, the partnership was able to sell the land for P480,000. What is the amount of cash actually contributed by C in the partnership?

a. P80,000
b. P120,000
c. P150,000
d. P170,000

42. On January 1, 2020, A, B and C formed ABC Partnership with original total agreed capitalization of P300,000 by making equal capital contribution. The partners decided to divide the partnership profit or loss in the ratio of 5:3:2. During the year, A and B made additional investment amounting to P60,000 and P30,000, respectively, while B and C made drawing amounting to P10,000 and P40,000. After closing the income summary account, the capital balance of Partner B on December 31, 2020 is reported at P150,000. What is the capital balance of Partner A on December 31, 2020?

a. P260,000
b. P210,000
c. P220,000
d. P240,000

43. On December 31, 2020, ABC Partnership reported the following capital balances: Partner A - P200,000; Partner B - P300,000; and Partner C - P500,000 with profit or loss ratio of 6:1:3. On January 1, 2021, D is admitted to ABC Partnership by purchasing 40% of the capital interest of Partner C at a purchase price of P250,000. What is the capital balance of Partner D on January 1, 2021 after his admission to the partnership?

a. P250,000
b. P400,000
c. P300,000
d. P200,000

44. On December 31, 2020, ABC Partnership reported the following capital balances: Partner A - P500,000; Partner B - P100,000; and Partner C - P400,000 with profit or loss ratio of 3:5:2. On January 1, 2021, D is admitted to ABC Partnership upon investment of P300,000 for 40% capital interest in the new partnership with total agreed capitalization of P1,400,000. What is the revaluation of existing assets to be recognized by the partnership as a result of admission of partner D?
    a. Impairment Loss of P150,000
    b. Positive Asset Revaluation of P100,000
    c. Impairment Loss of P160,000
    d. Positive Asset Revaluation of P260,000

45. On December 31, 2020, ABC Partnership reported the following capital balances: Partner A - P200,000; Partner B - P500,000; and Partner C - P300,000 with profit or loss ratio of 6:1:3. On January 1, 2021, Partner A decided to retire and received P140,000 as payment for his capital interest. At the date of retirement of Partner A, the assets of ABC Partnership are properly valued. What is the adjusted capital balance of Partner B after the retirement of Partner A?
    a. P490,000
    b. P510,000
    c. P485,000
    d. P515,000

46. On December 31, 2020, ABC Partnership with profit or loss ratio of 5:4:1 reported the its financial position as follows:

Cash	1,000,000		Liabilities to third person	1,200,000
Receivable from A	200,000		Payable to B	250,000
Other Noncash assets	800,000		Payable to C	350,000
			A, capital	300,000
			B, capital	100,000
			C, capital	(200,000)

ABC Partnership became bankrupt that eventually resulted to its liquidation. The court-appointed liquidator sold the other noncash assets and paid P50,000 liquidation expense. At the end of liquidation, Partner B received P150,000. What is the net proceeds from the sale of other noncash assets?

a. P500,000
b. P400,000
c. P600,000
d. P300,000

47. On December 31, 2020, ABC Partnership with profit or loss ratio of 2:3:5 reported the its financial position as follows:

Cash	100,000		Liabilities to third person	200,000
Noncash assets	400,000		A, capital	100,000
			B, capital	150,000
			C, capital	50,000

ABC Partnership became bankrupt. The partnership undergoes installment liquidation. On January 31, 2021, the court-appointed liquidator sold half of the noncash assets at a gain of P50,000. On the same date, the liquidator paid P20,000 liquidation expense and 3/4 of the liabilities to third persons. The liquidator also withheld P30,000 cash for future liquidation expense. What is the amount received by Partner A on January 31, 2021?

a. P60,000
b. P20,000
c. P40,000
d. P80,000

48. On December 31, 2020, ABC Incorporated became bankrupt. The statement of financial position of the company as of December 31, 2020 is provided below:

Cash	100,000		Accounts payable	100,000
Inventory	400,000		Salaries payable	60,000
Land	500,000		Income tax payable	30,000
			Note payable	50,000
			Loan payable	300,000
			Mortgage payable	200,000
			Contributed capital	420,000
			Retained earnings	(150,000)

The inventory which has net realizable value of P200,000 secures the loan payable while the land which has fair value of P310,000 secures the mortgage payable. The court-appointed liquidator incurred and paid liquidation expenses amounting to P20,000.

What is the amount received by the mortgagee from the liquidation of ABC Incorporated?

a. P200,000
b. P310,000
c. P100,000
d. P80,000

49. Using the same data in number 48, what is the amount received by the lender of loan payable from the liquidation of ABC Incorporated?

a. P300,000
b. P240,000
c. P400,000
d. P320,000

50. Using the same data in number 48, what is the amount paid by liquidator to unsecured claims with priority?

a. P90,000
b. P60,000
c. P110,000
d. P80,000

51. Using the same data in number 48, what the amount received by unsecured creditors without priority?

a. P90,000
b. P100,000
c. P40,000
d. P60,000

52. On December 31, 2020, the reciprocal accounts in the separate books of the Home Office and Lipa Branch are properly reconciled. On December 31, 2021, the Investment in Lipa Branch Account has an unadjusted balance of P200,000. The following unreconciled transactions that occurred during 2021 are discovered:
    i. Lipa Branch paid P20,000 loan payable of the Home Office but failed to notify the Home Office.
    ii. Home Office shipped goods to Lipa Branch costing P10,000 but the latter debited the amount twice to Home Office Account.
    iii. Lipa Branch property reported net loss of P30,000 but the Home Office instead recorded net income for Lipa Branch in the amount P30,000.
    iv. Home Office collected P40,000 receivable of Lipa Branch but failed to notify Lipa Branch.
    v. Home Office remitted P50,000 cash to Pila Branch but still in transit as of December 31, 2021.

    What is the adjusted balance of Investment in Lipa Branch Account on December 31, 2021?
    a. P150,000
    b. P140,000
    c. P120,000
    d. P180,000

53. Using the same data in number 52, what is the unadjusted balance of Home Office Account on December 31, 2021?
    a. P140,000
    b. P160,000
    c. P100,000
    d. P150,000

54. The following financial data are provided by ABC Incorporated concerning its Home Office and Branch for the year ended December 31, 2020:

	Home office		Branch
Beginning inventory	100,000		70,000
Shipment to branch	150,000		
Shipment from home office			250,000
Purchases from outsiders	500,000		100,000
Ending inventory	120,000		80,000
Sales to third persons	1,000,000		600,000
Operating expenses	300,000		200,000

Prior to 2020, the Home Office consistently shipped goods to Branch at 25% above cost. 6/7 of the beginning inventory of the Branch came from the Home Office while P35,000 of the ending inventory of the Branch came from the outside suppliers. The Branch employs FIFO cost accounting system for its inventories.

What is the branch's reported net income in its separate income statement for the year ended December 31, 2020?

a. P60,000
b. P70,000
c. P80,000
d. P50,000

55. Using the same data in number 54, what is the understatement of the branch's reported net income in its separate income statement for the year ended December 31, 2020?

a. P112,000
b. P94,000
c. P100,000
d. P82,000

56. Using the same data in number 54, what is the ending inventory to be reported by ABC Incorporated in its external statement of financial position as of December 31, 2020?

a. P200,000
b. P188,000
c. P182,000
d. P194,000

57. On January 1, 2020, Entity A, a small and medium enterprise, made an investment in a jointly controlled entity C in the amount of P100,000 for 50% capital interest. Entity A incurred transaction costs amounting to P10,000 in relation to the acquisition of the investment. Entity A has joint control over the Entity C but it will have only have right to the net assets of the said entity. On December 31, 2020, Entity C reported net income of P40,000 and declared dividends amounting to P30,000. On December 31, 2020, Entity A's Investment in Entity C has fair value of P112,000. Under Cost Method, what is the book value of Investment in Entity C on December 31, 2020?
    a. P112,000
    b. P115,000
    c. P110,000
    d. P100,000

58. Using the same data in number 57, what is the net effect in 2020 profit or loss to be reported by Entity A concerning its Investment in Entity C under Fair Value Method?
    a. P20,000 net profit
    b. P15,000 net profit
    c. P5,000 net profit
    d. P17,000 net profit

59. On January 1, 2020, Entity A, a publicly listed entity, and Entity B, a public listed entity, established Entity C by making investment in the amount of P600,000 and P400,000 for 60:40 capital interests, respectively. Despite the ownership interest in Entity C, its relevant activities require unanimous vote of Entity A and Entity B. The organizing entities will have rights to the net assets of Entity C. For the years ended December 31, 2020, 2021 and 2022, Entity C reported the following data:

	Net Income (net loss)	Dividend Declaration
2020	100,000	50,000
2021	(2,000,000)	None
2022	3,000,000	500,000

What is the investment loss to be reported by Entity A for the year ended December 31, 2021?

a. (P1,200,000)
b. (P600,000)
c. (P660,000)
d. (P630,000)

60. Using the same data in number 59, what is the investment income to be reported by Entity B for the year ended December 31, 2022?

a. (P820,000)
b. (P1,200,000)
c. (P250,000)
d. (P400,000)

61. On January 1, 2020, Entity A and Entity B established Entity C with 60:40 capital interests, respectively. Despite the ownership interest in Entity C, its relevant activities require unanimous vote of Entity A and Entity B. The organizing entities will have rights to the assets, and obligations for the liabilities, relating to Entity C. The terms of the contractual agreement between Entity A and Entity provides for the following:

- Entity A owns the building and owes the loan payable.
- Entity B owns the land and owes the mortgage payable.
- Other assets and liabilities are owned and owed based on their capital interests ratio.

On December 31, 2020, Entity C reported the following data:

Inventory	1,000,000	Accounts payable	1,500,000
Building	2,000,000	Loan payable	1,000,000
Land	3,000,000	Mortgage payable	500,000
		Stockholders' equity	3,000,000

What is the total assets to be reported by Entity A on December 31, 2020 in relation to its interest in Entity C?

a. P1,800,000
b. P2,600,000
c. P2,000,000
d. P2,400,000

62. Using the same data in number 61, what is the total liabilities to be reported by Entity B on December 31, 2020 in relation to its interest in Entity C?

a. P1,200,000
b. P500,000
c. P1,400,000
d. P1,100,000

63. On December 1, 2020, Land Transportation Office (LTO) collected P1,000,000 franchise fee from applicant of certificate of public convenience. On December 20, 2020, LTO remitted the collection to Bureau of Treasury (BoT) through Land Bank of the Philippines. What is the journal entry of LTO on December 20, 2020?

a.	DR; Cash in bank (LBP)	1,000,000		
	CR: Cash Collecting Officer			1,000,000
b.	DR: Cash Treasury Agency Deposit Regular	1,000,000		
	CR: Cash Collecting Officer			1,000,000
c.	DR: Cash MBS - Regular	1,000,000		
	CR: Cash Collecting Officer			1,000,000
d.	DR: Cash Treasury Agency Deposit Regular	1,000,000		
	CR: Cash MDS Regular			1,000,000

64. Using the same data in number 63, what is the journal entry of BoT on December 20, 2020?

a.	DR; Cash in bank (LBP)	1,000,000		
	CR: Cash Treasury Agency Deposit Regular			1,000,000
b.	DR: Cash Treasury Agency Deposit Regular	1,000,000		
	CR: Cash Collecting Officer			1,000,000
c.	DR: Cash MDS - Regular	1,000,000		
	CR: Cash Collecting Officer			1,000,000
d.	DR: Cash Treasury Agency Deposit Regular	1,000,000		
	CR: Cash MDS Regular			1,000,000

65. On July 1, 2020, Department of Health (DOH) received a Notice of Cash Allocation (NCA) from Department of Budget and Management (DBM) in the amount of P940,000 net of applicable 6% withholding tax. What is the journal entry of DOH on July 1, 2020?

a.	DR; Cash in bank (LBP)	940,000		
	CR: Cash Treasury Agency Deposit Regular			940,000
b.	DR: Cash Treasury Agency Deposit Regular	940,000		
	CR: Cash Collecting Officer			940,000
c.	DR: Cash MBS - Regular	940,000		
	CR: Subsidy Income from NG			940,000
d.	DR: Cash Treasury Agency Deposit Regular	1,000,000		
	CR: Subsidy income from NG			1,000,000

66. On January 1, 2020, Lingkod Lasalyano Incorporated, a nonstock nonprofit organization, received P1,000,000 cash donation from a donor who stipulated that the fund shall be used for the acquisition of laptops to be used by the organization for the achievement of its

mission-vision. On July 1, 2020, the organization acquired a laptop at a cost of P100,000 with useful life of 5 years. What is the increase in unrestricted net asset to be reported by the organization for the year ended December 31, 2020?

a. P990,000
b. P80,000
c. P100,000
d. P90,000

67. On December 31, 2020, Bantay Kalikasan Incorporated, a nonstock nonprofit organization, reported the following fund:

Board designated fund from current fund	200,000
Term endowment fund	300,000
Regular endowment fund	600,000

What is the unrestricted net asset to be reported by Bantay Kalikasan Incorporation on December 31, 2020?

a. P500,000
b. P600,000
c. P200,000
d. P300,000

68. For the year ended December 31, 2020, Bantay Bata Incorporated, a nonstock nonprofit organization, reported the following cash flows:

Cash payment for interest on loan payable	(100,000)
Cash receipt from sale of souvenir items	300,000
Cash receipt from restricted donations	200,000
Cash receipt from unrestricted donations	1,000,000
Cash payment for principal of short term loan	(400,000)
Cash payments for operating expenses	(500,000)
Cash payment for acquisition of equipment	(600,000)

What is the net cash inflows (outflows) from operating activities to be reported by Bantay Kalikasan for the year ended December 31, 2020?

a. P700,000

b. P800,000
c. P400,000
d. P500,000

69. On July 1, 2020, the Republic of the Philippines (RP) granted a right or license to SMC Incorporated (SMC) to construct, maintain and operate a skyway in EDSA road for a period of 20 years that will start on January 1, 2021. RP did not guarantee any fixed payment to SMC for the operation of the expressway but it allows SMC to collect toll fees from the public for the use of the said skyway. SMC finished the construction of the skyway on December 31, 2020 at a cost of P1,000,000,000 and started the operation of the expressway on January 1, 2021. On December 31, 2021 Statement of Financial Position, what is the account with amount to be presented by SMC regarding its interest in the expressway?
    a. P950,000,000 Intangible Asset under PAS 38
    b. P1,000,000,000 Financial Asset under PFRS 9
    c. P950,000,000 Property, Plant and Equipment under PAS 16
    d. P950,000,000 Investment Property under PAS 40

70. ABC Incorporated established a benchmark for the direct materials of a unit of its product at 3 units of direct material per product at a standard cost of P5 per unit of direct material. During 2020, ABC Incorporated acquired 1,000 units of direct materials at total cost of P4,000 and produced 100 units of products using 800 units of direct materials. What is the direct material price variance?
    a. P800 Favorable
    b. P1,000 Favorable
    c. (P2,500) Unfavorable
    d. (P2,000) Unfavorable

71. ABC Incorporated established a benchmark for the direct labors of a unit of its product at 2 direct labor hours per product at a standard cost of P50 per direct labor hour During 2020, ABC Incorporated produced 1,000 units of products using 1,500 direct labor hours at total cost of P90,000. What is the direct labor efficiency variance?
    a. P25,000 Favorable

b. P10,000 Favorable
c. (P15,000) Unfavorable
d. (P5,000) Unfavorable

72. ABC Incorporated reported the following data for the year ended December 31, 2020:

Actual labor cost	1,000,000
Actual factory overhead cost	2,000,000
Net purchases of direct materials during the year	3,000,000
Decrease in direct materials inventory during the year	4,000,000
Increase in work in process inventory during the year	5,000,000
Decrease in finished goods inventory during the year	6,000,000

What is the cost of goods manufactured for the year ended December 31, 2020?

a. P10,000,000
b. P5,000,000
c. P11,000,000
d. P4,000,000

73. ABC Incorporated reported the following data for the year ended December 31, 2020 concerning its work in process inventory:

Beginning WIP in units		100,000
Ending WIP in units		150,000
Units started during the year		350,000
Normal spoilage in units	1/7 of units started	
Abnormal spoilage in units	½ of normal spoilage	

What is the units completed for the year ended December 31, 2020?

a. 225,000 units
b. 250,000 units
c. 275,000 units
d. 300,000 units

74. ABC Incorporated manufactured three joint products called Product A, B and C at a total joint costs of P500,000. The following data are provided concerning the three products:

Product	Quantity Product	Selling Price per Unit
A	1,000	P 50
B	6,000	P 20
C	3,000	P 10

What is the joint cost allocated to Product A using Physical Quantity or Unit Method?

a. P31,250
b. P50,000
c. P125,000
d. P166,667

75. Using the same data in number 74, what is the joint cost allocated to Product B using Relative Sales Value Method?
Solution

a. P166,667
b. P125,000
c. P300,000
d. P250,000

76. ABC Incorporated acquired majority of the common stocks of DEF Incorporated enabling the former to exercise control over the latter. In relation to the acquisition, ABC Incorporated incurred and paid the following costs:

Indirect cost of business combination	10,000
Direct cost of business combination	20,000
Bond issue cost for bonds payable classified as FLAC	30,000
Stock issuance cost	40,000
Listing fees of stocks to Philippine Stock Exchange	50,000

What is the total amount of the costs which are expensed as incurred?

a. P100,000
b. P80,000
c. P110,000
d. P30,000

77. On December 31, 2020, ABC Incorporated and DEF Incorporated entered into a merger whereby ABC will absorb the net assets of DEF in consideration for acquisition cost of P1,000,000. On the date of acquisition, the net assets of DEF has book value of P1,200,000 but its land is overstated by P400,000 while its inventories is understated by P150,000. In addition to the acquisition cost, ABC Incorporated incurred and paid direct cost and indirect cost of business combination amounting to P30,000 and P20,000, respectively. What is the goodwill arising from business combination?
    a. P50,000
    b. P80,000
    c. P70,000
    d. P100,000

78. On January 1, 2021, ABC Incorporated acquired 80% of voting common stocks of DEF Incorporated at acquisition cost of P1,200,000. On the date of acquisition, the net assets of DEF has book value of P1,500,000 but its investment property is overstated by P300,000 while its building is understated by P400,000. In addition to the acquisition cost, ABC Incorporated incurred and paid direct cost and indirect cost of business combination amounting to P30,000 and P20,000, respectively. What is the gain on bargain purchase?
    a. P100,000
    b. P80,000
    c. P50,000
    d. P30,000

79. On December 1, 2020, ABC Incorporated acquired a land classified as property, plant and equipment at a historical cost of $100,000 on account. The payable is due on January 31, 2021. The functional currency of ABC Incorporated is Philippine Peso (P). The direct exchange rates are presented below:

		12/1/2020	12/31/2020	1/31/2021
Buying Spot rate		1$ = P48	1$ = P49	1$ = P40
Selling Spot rate		1$ = P50	1$ = P52	1$ = P45

What is the foreign currency gain or loss for the year ended December 31, 2020?

a. P100,000 gain
b. P700,000 gain
c. (P200,000) loss
d. (P400,000) loss

80. Using the same data in number 79, what is the book value of land on December 31, 2020?

a. P5,000,000
b. P5,200,000
c. P4,800,000
d. P4,900,000

END

ANSWER KEY

1.	C	21.	A	41.	C	61.	B
2.	A	22.	C	42.	B	62.	D
3.	B	23.	B	43.	D	63.	B
4.	B	24.	D	44.	B	64.	A
5.	D	25.	C	45.	D	65.	C
6.	B	26.	A	46.	A	66.	D
7.	D	27.	D	47.	C	67.	C
8.	A	28.	B	48.	A	68.	A
9.	D	29.	D	49.	B	69.	A
10.	A	30.	B	50.	C	70.	B
11.	B	31.	A	51.	D	71.	A
12.	B	32.	B	52.	C	72.	B
13.	C	33.	C	53.	A	73.	A
14.	A	34.	C	54.	A	74.	B
15.	B	35.	B	55.	B	75.	C
16.	C	36.	C	56.	C	76.	B
17.	D	37.	B	57.	C	77.	A
18.	B	38.	A	58.	D	78.	B
19.	A	39.	D	59.	D	79.	C
20.	C	40.	B	60.	A	80.	A

41. Solution:

Capital contribution by A (FV of land)	480,000
Capital contribution by B (150,000 – 30,000)	120,000
Total capital contribution by A and B	600,000
Divide by capital interest ratio of A and B	80%
Total agreed capitalization of ABC Partnership	750,000
Multiply by capital interest ratio of C	20%
Cash contributed by C	**(C) 150,000**

42. Solution

Capital balance of B, December 31, 2020	150,000
Drawings by B in 2020	10,000
Additional investment by B in 2020	(30,000)
Capital balance of B, January 1, 2020 (300,000/3)	(100,000)
B's share in ABC Partnership's net income in 2020	30,000
Divide by B's profit interest ratio	30%
Net income of ABC Partnership 2020	100,000
Capital balance of A, January 1, 2020 (300,000/3)	100,000
Additional investment by B in 2020	60,000
Partner's A share in partnership net income in 2020 (100,000 x 50%)	50,000
Capital balance of A, December 31, 2020	**(B) 210,000**

43. Solution

Capital balance of D after his admission (500,000 x 40%)	**(D) 200,000**

44. Solution

Total capital contribution of all partners (500,000+100,000+400,000+300,000)	1,300,000
Total agreed capitalization of new partnership	1,400,000
Positive asset revaluation	**100,000**

45. Solution

Capital balance of B, December 31, 2020	500,000

Share of B in bonus from retiring partner (60,000 x ¼)	15,000
Capital balance of B after retirement of A	**515,000**

46. Solution

Total interest of B in the partnership (250,000+100,000)	350,000
Less mount received by B after liquidation	150,000
B's share in theoretical loss including partner's possible deficit	200,000
Divide by share in P&L of B	40%
Total theoretical loss including possible deficit	500,000
Multiply by share in P&L of C	10%
B's share in theoretical loss including possible deficit	50,000
Less total interest of C in partnership (350,000 – 20,000)	150,000
Amount received by C after liquidation	100,000
Total amount received by partners (0+150,000+100,000)	250,000
Liquidation expense paid by liquidator	50,000
Liabilities to third person paid by liquidator	1,200,000
Total	1,500,000
Less beginning cash before liquidation	1,000,000
Net proceeds from sale of noncash assets	**(A) 500,000**

47. Solution

Beginning cash	100,000
Net proceeds from sale of noncash assets [(400,000 x ½) + 50,000]	250,000
Liquidation expenses paid	(20,000)
Liabilities paid to third person (200,000 x ¾)	(150,000)
Cash withheld for future liquidation expenses	(30,000)
Cash withheld for unpaid liabilities to third person (200,000 x ¼)	(50,000)
Cash available for distribution to partners	100,000
Less total capital interest of all partners (100,000 + 150,000 + 50,000)	300,000
Theoretical loss including maximum possible loss	(200,000)
Capital balance of A before liquidation	100,000
Share in theoretical loss (200,000 s 20%)	(40,000)

Share in deficit of C (50,000 x 2/5)	(20,000)
Amount received by A on 1/31/2021	**(C) 40,000**

48 – 51. Solution

Cash	100,000
Free land (310,000 – 200,000)	110,000
Total free assets	210,000
Less unsecured claims with priority (20,000 + 60,000 + 30,000)	110,000
Net free assets	100,000
Divide by unsecured claims without priority including Unsecured portion of partially secured loans Payable (100,000 + 50,000 + 100,000)	250,000
Recovery rate of unsecured creditors without priority	40%
Amount received by mortgagee (fully secured creditors)	**200,000 (A)**
Net realizable value of inventory	200,000
Recovery amount of unsecured portion of loan Payable (100,000 x 40%)	40000
Amount received by lender of loan payable (partially secured)	**(B) 240,000**
Liquidation expenses	20,000
Salaries payable	60,000
Income tax payable	30,000
Amount paid by liquidator to unsecured claims with priority	**(C) 110,000**
Accounts payable	100,000
Notes payable	50,000
Unsecured claims without priority	150,000
Multiply by recovery rate of unsecured claims without priority	40%
Amount received by unsecured creditors without priority	**(D) 60,000**

52 – 53. Solution:

Unadjusted balance of investment in Lipa Branch account	200,000
Unrecorded payment of HO loan payable by Lipa branch	(20,000)
Erroneous recording of Branch's net loss	(60,000)
Adjusted balance of investment in Lipa Branch	**(C) 120,000**

Unadjusted balance of home office account	**140,000**
Erroneous recording of shipment from home office	20,000
Unrecorded collection of Branch's receivable by HO	(40,000)
Adjusted balance of investment in Lipa Branch	120,000

54 – 56. Solution:

Sales revenue of branch		600,000
Less cost of sales of branch:		
Beginning inventory	70,000	
Add shipment from home office	250,000	
Add purchases of branch from outsiders	100,000	
Total	420,000	
Less ending inventory	80,000	340,000
Gross profit		260,000
Less operating expenses		200,000
Net income of branch 2020		**60,000(A)**

Overstatement of branch beginning inventory from HO [(70,000 x 6/7) x 25/125]	12,000
Overstatement of shipment from HO	100,000
Overstatement of branch ending inventory from HO (45,000 x 67/167)	(18,000)
Understatement of 2020 branch reported net income	**(B) 94,000**

Ending inventory of HO at LCNRV	120,000
Ending inventory of branch as reported in its separate Financial statement	80,000
Overstatement of branch ending inventory from HO (45,000 x 67/167)	(18,000)
Ending inventory of ABC at LCNRV, 12/31/2020	**(C)182,000**

57. Solution

Book value of investment under Cost method, Dec. 31, 2020 (Cost – Impairment).	**(C) 110,000**

58. Solution

Transaction costs	(10,000)
Dividend income from joint venture (30,000 x 50%)	15,000
Unrealized holding gain on changes in FV (112,000-100,000)	12,000
Net effect in 2020 profit	**(D) 17,000**

59 – 60. Solution

Maximum limit on investment loss year 2021 (600,000 + 60,000 – 30,000)	**(D) 630,000**
2022 supposedly investment income (3,000,000 x 40%)	1,200,000
Less 2021 unabsorbed investment loss [(2,000,000 x 40%) – (400,000 + 40,000 – 20,000)]	380,000
2022 investment income of Entity B	**(A) 820,000**

61 – 62. Solution

Building owned by Entity A	2,000,000
Share of interest of Entity A on co-owned inventory (,000,000 x 60%)	600,000
Total assets to be reported by Entity A	**(A) 2,600,000**
Mortgage payable owed by Entity B	500,000
Share of Entity B on co-owed AP (1,500,000 x 40%)	600,000
Total liabilities to be reported by Entity B	**(C)1,100,000**

56. Solution

Reclassification from TRNA to UNA due to acquisition of laptop	100,000
Less depreciation expenses [(100,000/5) x 6/12]	10,000
Increase in unrestricted net asset	**(D)90,000**

68. Solution

Cash payment for interest on loan payable	(100,000)
Cash receipts from sale of souvenir items	300,000
Cash receipts from unrestricted donations	1,000,000
Cash payments for operating expenses	(500,000)
Net cash inflows from operating activities	**(A)700,000**

69. Solution

Cost of intangible assets	1,000,000,000
Less accumulated amortization, 12/31/2021 (1,000,000,000/20)	50,000,000
BV of intangible asset under PAS 38 and IFRIC 12	**950,000,000**

70. Solution

Standard price	5.00
Less Actual price	4.00
Difference	1.00
Multiply by actual materials purchase	1,000
Favorable variance	**(B)1,000**

71. Solution

Standard hours	2,000
Less Actual hours	1,500
Difference	500
Multiply by standard labor rate	50
Favorable variance	**25,000 (A)**

72. Solution

Actual labor cost	1,000,000
Actual factory overhead cost	2,000,000
Net purchase of direct materials during the year	3,000,000
Decrease in direct materials inventory during the year	4,000,000
Increase in work in process inventory during the year	(5,000,000)
Cost of goods manufactured during the year	**(B)5,000,000**

73. Solution

Beginning WIP in units		100,000
Add units started during the year		350,000
Total		450,000
Less: Ending WIP in units	150,000	
Normal spoilage units (350,000 x 1/7)	50,000	
Abnormal spoilage units (50,000 x ½)	25,000	225,000
Units completed for the year ended Dec. 31. 2020		**225,000 (A)**

74. Solution

Allocated joint cost to product A (500,000 x 1,000/10,000)	**(B)50,000**

75. Solution

Allocated joint cost to product B (500,000 x 120,000/200,000)	**300,000**

76. Solution

Indirect cost of business combination	10,000
Direct cost of business combination	20,000
Listing fees of stock to PSE	50,000
Total amount of costs to be expensed	**(B) 80,000**

77. Solution

Cost of acquisition	1,000,000
Less FVNAA (1,200,000 – 400,000 + 150,000)	950,000
Goodwill	**50,000 (A)**

78. Solution

Acquisition cost	1,200,000
Initial measurement of NCI (1,600,000 x 20%)	320,000
Total	1,520,000
Less FVNAA (1,500,000 – 300,000 + 400,000)	1,600,000
Gain on bargain purchase	**(B) 80,000**

79. Solution

2020 ex loss (100,000 x (50-52)	**(C) (200,000) loss**

80. Solution

BV of land, 12/31/2020 (100,000 x 50)	**5,000,000 (A)**

AFAR Mock Board - Number Two

1. Under IFRIC 12: Service Concession Arrangements, what is the proper classification of the infrastructure asset on the part of the operator if the latter receives a right or license to charge users of the public service and such right to charge users of the public service is not an unconditional right to receive cash because the amounts are contingent on the extent that the public uses the service?
    a. Intangible Asset in accordance with PAS 38
    b. Property, Plant and Equipment in accordance with PAS 16
    c. Investment Property in accordance with PAS 40
    d. Financial Asset under PFRS 9

2. Under PFRS 11, which is incorrect about the accounting treatment by non-SME Venturer of its Investment in Joint Venture?
    a. The venturer shall recognize impairment loss on Investment in Joint Venture if the book value of the investment is lower than its recoverable amount which is the higher between value in use or fair value less cost to sell.
    b. The venturer shall recognize cash or property dividend from joint venture as dividend income when its right to receive dividend is established.
    c. The venturer shall recognize its share in the net income of the joint venture as investment income with corresponding increase to investment in joint venture.
    d. The venturer shall recognize its share in the net loss of the joint venture as investment loss with corresponding decrease to investment in joint venture.

Under PFRS 10, the following are the essential elements of control of an investor (acquirer) over the investee (acquiree), except
    a. The investor has power over the investee which means that the investor has existing right that give it the ability to direct the relevant activities of the investee.
    b. The investor has exposure or rights to variable returns from its involvement with the investee.
    c. The investor has the ability to use its power over the investee to affect the amount of the investor's return.
    d. The investor has ownership of more than 50% of the ordinary shares of investee.

4. Under PAS 39, which of the following statements concerning unrealized holding gain or loss on changes in value of derivatives is correct?
    a. Unrealized holding gain or loss on changes in value of derivatives designated as fair value hedge due to its effective portion shall be presented in other comprehensive income with reclassification adjustment to profit or loss.
    b. Unrealized holding gain or loss on changes in value of derivatives designated as hedge of net investment in foreign operation due to its effective portion shall be presented in profit or loss.
    c. Unrealized holding gain or loss on changes in value of derivatives classified as undesignated hedge due to its effective portion shall be presented in profit or loss.
    d. Unrealized holding gain or loss on changes in value of derivatives designated as cash flow hedge due to its effective portion shall be presented in other comprehensive income without reclassification adjustment to profit or loss.

5. What is the proper classification in the statement of financial position of a nonprofit organization of a current fund designated by the Board of Trustees for the construction of building to be used for charitable purposes when construction will start after a period of three years?
    a. Permanently restricted net assets
    b. Temporarily restricted net assets
    c. Unrestricted net assets
    d. Board of Trustees' net assets

6. Under Government Accounting Manual, it refers to an authorization issued by the DBM to NGAs to incur obligations for specified amounts contained in a legislative appropriation in the form of budget release documents.
    a. Appropriation
    b. Allotment
    c. Obligation
    d. Disbursement

7. Under PAS 21, what is the accounting treatment of foreign exchange differences arising from translating foreign currency denominated elements of financial statements to the entity's functional currency?
    a. It shall be presented and recognized in other comprehensive income with reclassification adjustment to profit or loss.

b. It shall be presented and recognized in other comprehensive income without reclassification adjustment to profit or loss.
c. It shall be presented and recognized in profit or loss.
d. It shall be presented and recognized as change in accounting policy in statement of changes in equity.

8. Under PFRS 3, which of the following statements concerning the accounting treatment of the different types of costs incurred in relation to a business combination is correct?
   a. Direct costs of business combination shall form part of the consideration given up for purposes of computation of goodwill or gain on bargain purchase.
   b. Transaction costs incurred for the issuance of bonds payable classified as financial liability at fair value through profit or loss that forms part of consideration given up shall be amortized over the term of the bonds using effective interest method.
   c. Costs incurred for the issuance of stocks issued as consideration given up for business combination shall be initially charged to share premium arising from issuance of the related shares.
   d. Listing fees incurred for registering the stocks of a corporation to stock exchange market shall be capitalized as goodwill arising from business combination.

9. Under PAS 21, when translating an entity's financial statements in functional currency to entity's presentation currency, which is correct?
   a. Monetary asses/liabilities shall be translated using closing rate while nonmonetary assets/liabilities shall be translated using transaction rate.
   b. Retained earnings shall be translated using average rate during the period.
   c. Income and expense accounts shall be translated using closing rate.
   d. Contributed capital accounts shall be translated using transaction rate.

10. Under PAS 27, if the parent corporation elected to account its investment in subsidiary using fair value model through other comprehensive income in its separate financial statements, which is correct in the parent's separate income statement?
    a. Gain on bargain purchase will be recognized in profit or loss if the fair value of the net assets acquired is higher than the fair value of consideration given up by the parent corporation.

b. Impairment loss on investment in subsidiary will be recognized in profit or loss if the book value of the investment in subsidiary is lower than its recoverable amount which is the higher between value in use or fair value less cost to sell.
c. Dividend income from subsidiary will be recognized in profit or loss when its right to receive dividends is established.
d. Share in adjusted net income (net loss) of the subsidiary will be recognized in profit or loss from the date the parent obtains control of the subsidiary.

11. Under PFRS 3, which of the following transactions is a measurement period adjustment that must be retroactively adjusted to goodwill or gain on bargain purchase within the measurement period not exceeding one year from the acquisition date?
    a. Change in the fair value of contingent consideration as a result of meeting an earnings target that occurred after the acquisition date.
    b. Change in the fair value of contingent liability as a result of additional information that the acquirer obtained after the acquisition date about facts and circumstances that existed at the acquisition date.
    c. Change in the fair value of contingent liability as a result of reaching a specified share price that occurred after the acquisition date.
    d. Change in the fair value of contingent consideration as a result of reaching a milestone on research and development project that occurred after the acquisition date.

12. Parent Corporation has different investment in stocks consisting of investment in subsidiary, investment in associate, investment in joint venture and investment in fair value. Under PFRS 3 and PFRS 10, which of the following dividends from investee will be presented in the Consolidated Statement of Comprehensive Income of the Parent Corporation if the latter account for all its investment in subsidiary using cost method in its separate financial statements?
    a. Dividend from subsidiary
    b. Dividend from associate
    c. Dividend from joint venture
    d. Dividend from fair value investment

13. In which type of hedging transactions or relationships will there be no gain or loss on hedged item?
    a. Fair value hedge of firm commitment importation using forward contract receivable.

b. Cash flow hedge of forecasted exportation using put option.
c. Undesignated hedge of foreign currency denominated accounts receivable using forward contract payable.
d. Hedge of net investment in foreign operation using foreign currency denominated note payable.

14. Which of the following scenarios will decrease the cost of goods sold during the year?
    a. Increase in direct labor costs during the year.
    b. Increase in raw materials inventory during the year.
    c. Decrease in work in process inventory during the year.
    d. Decrease in finished goods inventory during the year.

15. When will the equivalent unit of production under FIFO Process be the same with the equivalent unit of production under Average Process?
    a. When there is no ending work in process inventory.
    b. When there is no completed inventory during the period.
    c. When the excess of the actual units started over the actual units completed is equal to the ending work in process inventory.
    d. When the actual units completed is higher than the actual units started.

16. Two parties enter into a joint arrangement which is structured through an incorporated entity in which each party has a 50% ownership interest. The purpose of the arrangement is to manufacture materials required by the parties for their own, individual manufacturing processes. The arrangement ensures that the parties operate the facility that produces the materials to their quantity and quality specifications.

    The contractual arrangement between the parties specifies the following aspects of the arrangement:

    - Under the terms of the arrangement, the parties have agreed to purchase all the output produced by the entity in a ratio of 50:50.
    - The entity is not permitted to sell any of the output to third parties, unless this is approved by the two parties to the arrangement. Because the purpose of the arrangement is to provide the parties with output they require, such sales to third parties are expected to be uncommon and insignificant in volume and value.
    - The price of the output sold to the parties is set by both parties at a level that is designed to cover the costs of production and administrative expenses

incurred by the entity. On the basis of this operating model, the arrangement is intended to operate at a break-even level.

Under PFRS 11, what is the proper accounting classification of this joint arrangement?

a. Joint Operation
b. Joint Venture
c. Jointly Controlled Asset
d. Jointly Controlled Entity

17. Under PFRS 15, which of the following criteria may allow an entity to recognize revenue from customers over a period of time instead of a specific point in time?
    a. The entity's performance does not create an asset with an alternative use to the entity and the entity has does not have an enforceable right to payment for performance completed to date.
    b. The entity's performance creates or enhances an asset that the entity controls as the asset is created.
    c. The customer simultaneously receives and consumes all of the benefits provided by the entity as the entity performs.
    d. The customer has the significant risks and rewards related to the ownership of the asset particularly upon transfer of title or ownership.

18. Under GAAP, what is the most valid reason for the incremental credit to the capital of a newly admitted partner in addition to his properly valued contributed capital?
    a. Goodwill arising from admission of a new partner in an existing partner
    b. Asset revaluation of the existing assets of the partnership
    c. Impairment of the existing assets of the partnership
    d. Capital bonus coming from existing partners

19. An entity grants a franchisee the right to operate a restaurant in a specific market using the entity's brand name, concept and menu for a period of ten years. The entity has granted others similar rights to operate this restaurant concept in other markets. The entity commonly conducts national advertising campaigns, promoting the brand name, and restaurant concept generally. The franchisee will also purchase kitchen equipment from the entity. The entity will receive P950,000 upfront (P50,000 for the kitchen equipment and P900,000 for the franchise right). Under PFRS 15, how shall the entity recognize the P950,000 transaction price as revenue from contract with customers?

a. The whole P950,000 upfront fee shall be recognized as revenue over a period of time of 10 years, the term of the contract.
b. The whole P950,000 upfront fee shall be recognized as revenue at a specific point of time which is the date delivery of the kitchen equipment.
c. The whole P950,000 upfront fee shall be recognized as revenue at a specific point of time which is the date of expiration of the 10-year term of the contract.
d. The P50,000 upfront fee shall be recognized as revenue at a specific point of time which is the date of delivery of the kitchen equipment while the remaining P900,000 upfront fee shall be recognized over a period of time of 10 years, the term of the contract.

20. Which of the following statements is correct in the year when the estimated contract price of a long-term construction contract is lower than the estimated total construction cost of the project?
    a. The cumulative gross revenue recognized as of the end of this year will be equal to the construction in progress balance as of the end of this year.
    b. The construction in progress as of the end of this year computed under percentage of completion method will be equal to the construction in progress as of the end of this year computed under cost recovery method.
    c. The costs of construction to be presented in the statement of comprehensive income for this year will be equal to the construction cost incurred during the year.
    d. The construction in progress as of the end of this year will be equal to the percentage completed as of the end of this year multiplied by the estimated contract price as of the end of this year under percentage of completion method while the construction in progress as of the end of this year will be equal to the cumulative costs incurred as of the end of this year under cost recovery method.

21. Which of the following instances will increase the cost of goods sold for the year ended?
    a. Increase in Raw Materials Inventory during the year
    b. Decrease in Work in Process Inventory during the year
    c. Increase in Finished Goods Inventory during the year
    d. Decrease in Direct Labor Cost during the year

22. At the time of retirement of a partner, he receives an amount more than his capital balance before retirement. Which of the following statements is correct?
    a. If the assets of the partnership are properly valued at the time of retirement, the capital balances of the remaining partners will decrease as a result of retirement.
    b. If the assets of the partnership are not properly valued at the time of retirement, the capital balances of the remaining partners will decrease as a result of retirement.
    c. If the assets of the partnership are not properly valued at the time of retirement, impairment loss of existing assets is recognized at the time of retirement.
    d. All of the above.

23. At the time of liquidation of general partnership, which of the following credits shall be settled first by the liquidating partner?
    a. Those advances made by the partners to the partnership
    b. Those claims of the partners regarding their capital contribution
    c. Those liabilities of the partnership to third persons
    d. Those claims of the partners regarding their share in partnership profit

24. At the time of corporate liquidation, the preferred stockholders were able to receive the liquidation value of their shares but the common stockholders received nothing. Which corporate creditors were fully paid in this scenario?
    I. Fully secured creditors
    II. Partially secured creditors
    III. Unsecured creditors with priority
    IV. Unsecured creditors without priority
    a. I only
    b. I and III only
    c. I, II and III only
    d. I, II, III and IV

25. At the time of corporate liquidation, which of the following unsecured creditors with priority shall be settled last from the free assets of the liquidated corporation?
    a. Liability for civil damages arising from corporate crime
    b. Liability for civil damages arising from corporate tort or quasi-delict
    c. Liability for employee benefits
    d. Liability for taxes to government

26. Under PFRS 15, when shall the consignor recognize revenue from consignment sales arrangement?
    a. From the moment the consignee sells the goods to final consumers
    b. From the moment the consignor delivers the goods to the consignee
    c. From the moment of collection by the consignee of the proceeds of the sale from final consumers
    d. From the moment of remittance by the consignee to the consignor of the collection from final consumers

27. Under PFRS 15, which of the following factors indicates that the revenue from contracts with customers is recognized from the moment the entity satisfies the performance obligation at a point in time?
    a. When the customer simultaneously receives and consumes all of the benefits provided by the entity as the entity performs.
    b. When the entity has transferred physical possession of the asset to the customer.
    c. When the entity's performance creates or enhances an asset that the customer controls as the asset is created.
    d. When the entity's performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for performance completed to date.

28. Under PFRS 15, what is the criteria before entity may recognize the incremental costs of obtaining a contract?
    a. If the entity expects to recover those costs.
    b. If the entity receives the costs from the customer.
    c. If the customer signs the contract with the entity.
    d. If the customer violates the contract with the entity.

29. Under PFRS 15, costs incurred to fulfill a contract are recognized as an asset if and only if all of the following criteria are met, except
    a. The costs relate directly to a contract.
    b. The costs generate or enhance resources of the entity that will be used in satisfying performance obligations in the future.
    c. The costs are reasonably possible to provide future economic benefits to the entity and can be measured reliably.
    d. The costs are expected to be recovered.

30. Under PFRS 15, how shall an asset recognized in respect of the costs to obtain a contract or costs to fulfill a contract be recognized as an expense in the statement of comprehensive income?

a. It shall be expensed as incurred.
b. It shall be amortized on a systematic basis that is consistent with the pattern of transfer of the goods or services to which the asset relates.
c. It shall be amortized on straight line basis over the term of the contract with the customers.
d. It shall not be amortized but instead subjected to annual impairment test especially if there is indicator that the recoverable amount of the asset is lower than its book value.

31. Under PFRS 15, how shall installments sales revenue of a residential property under pre-completion stage covered by Contract to Sell be recognized by the long-term construction entity?
    a. It shall be recognized as revenue over time.
    b. It shall be recognized as revenue at a point in time.
    c. It shall be recognized as revenue on the date of full payment of the price under cash basis method.
    d. It shall be recognized as revenue on the date of execution of the deed of absolute sale.

32. Which of the following costs is considered prime cost, conversion cost and product cost at the same time?
    I. Wages of factory workers
    II. Depreciation of machinery used to manufacture the product
    III. Freight in and insurance in transit of the main materials of the product
    IV. Salaries of factory foreman, factory janitors and factory security guard
    a. I and IV only
    b. I, II and IV only
    c. I and II only
    d. I only

33. What is the accounting treatment of material over-application or under-application of factory overhead in normal costing?
    a. It shall be closed to cost of goods sold only.
    b. It shall be closed proportionately to raw materials ending inventory, work in process ending inventory, finished goods inventory and cost of goods sold.
    c. It shall be closed proportionately to work in process ending inventory, finished goods inventory and cost of goods sold.
    d. It shall be expensed as incurred.

34. What is the accounting treatment of net realizable value of by-product if is considered significant by the company?
    a. It shall be presented as other income by the company.
    b. It shall be presented as additional sales revenue of the main products of the company.
    c. It shall be presented as deduction from cost of goods sold of the main products of the company.
    d. It shall be presented as deduction from total manufacturing cost of the main products of the company.

35. If the actual direct labor cost of the company is higher than the standard direct labor cost, which of the following relationships regarding the journal entry to record direct labor variances is always true?
    a. The credit to one type of direct labor variance is higher than the debit to the other type of direct labor variance.
    b. The debit to work in process account is lower than the credit to salaries payable or cash account.
    c. The direct labor rate variance account has been debited while the direct labor efficiency variance account has been credited.
    d. The direct labor rate variance account has been credited while the direct labor efficiency variance account has been debited.

36. What shall be the proper basis for the computation of direct material price variance for the period ended?
    a. Actual direct materials used for the period ended.
    b. Actual direct materials at the beginning of the period.
    c. Actual direct materials at the end of the period.
    d. Actual direct materials purchased for the period ended.

37. Under generally accepted accounting principles, what is the proper financial statement presentation of deferred gross profit as of the end of the year resulting from installment sales?
    a. Other comprehensive income in the Statement of Comprehensive Income
    b. Unearned revenue in the Statement of Financial Position
    c. Contra installment receivable in the Statement of Financial Position
    d. Profit or loss in the Statement of Comprehensive Income

38. Under PFRS 15, what is the proper measurement of revenue from contract with customers if the entity received a non-cash consideration?

a. Stand-alone selling price of the good or service promise in the contract.
b. Fair value of the consideration received.
c. Book value of the consideration received.
d. Historical cost of the consideration received.

39. In what specific date will the balance of Construction in Progress computed under Percentage of Completion Method be always the same with the balance of Construction in Progress under Cost Recovery Method?
    I. In the year when the entity recognizes realized gross loss under percentage of completion.
    II. In the year when the entity recognizes realized gross profit under cost recovery method.
    III. In the year when the estimated total costs to complete the project exceed the estimated total contract price.
    IV. In the year of completion of the project.
    a. I, III and IV only
    b. IV only
    c. II and III only
    d. III and IV only

40. What is the reason for the understatement of the net income reported by the branch in its separate income statement?
    a. Overstatement of cost of goods sold reported by the branch due to goods acquired from the home office.
    b. Overstatement of beginning inventory of the branch due to goods acquired from home office.
    c. Overstatement of ending inventory of the branch due to goods acquired from home office.
    d. Overstatement of purchases for the year reported by the branch for goods coming from the home office.

41. VAIO Inc. operates a number of branches in the provinces. On December 31, 2015, its Davao Branch showed a home office account balance of P54,700. The following data are provided by the accountants of the company:
    a. A P24,000 shipment, charged by Home Office to Davao Branch, was actually sent to and retained by Cebu Branch.
    b. A P30,000 shipment, intended and charged to Aklan Branch was shipped to Davao Branch and retained by the latter.

c. A P4,000 emergency cash transfer from Cebu Branch was not taken up in the Home Office Books.
d. Home Office collects a Davao Branch accounts receivable of P7,2000 and fail to notify the branch.
e. Home Office was charged for P2,400 for merchandise returned by Davao Branch on December 30. The merchandise is in transit.
f. Home Office erroneously recorded Davao's branch net income for 2015 at P32,550. The branch reported a net income of P25,350.

What is unadjusted balance of the Investment in Davao Branch account in the Home Office's book on December 31, 2015?

a. P51,100
b. P40,300
c. P54,700
d. P43,500

42. On December 31, 2015, the unadjusted balance of Investment in Butuan Branch Account is P165,920 in the Home Office's Book. The following data were found in your examination of the books of the Home Office and its Butuan Branch:
a. Transfer of fixed assets from Home Office amounting to P53,960 was not booked by Butuan Branch.
b. P10,000 covering marketing expense of Bataan Branch was charged by Home Office to Butuan Branch.
c. Butuan Branch recorded a debit note on inventory transfers from Home Office of P75,000 twice.
d. Home Office recorded cash transfer of P65,700 from Butuan Branch as coming from Davao Branch.
e. Butuan Branch reversed a previous debit memo from Bohol Branch amounting to P10,500. Home Office decided that this charge is appropriately Davao's Branch.
f. Butuan Branch recorded a debit memo from Home Office of P4,650 as P4,560.

What is the unadjusted balance of Home Office Current Account in Butuan Branch's Books on December 31, 2015?

a. P92,336
b. P98,230

c. P104,500
d. P111,170

43. On December 1, 2016, Bongbong Co. delivered 10 boxes of Otap bread and 10 packs of sample bread, for tasting-purposes, to Family Mart retail store on a consignment arrangement. The retail store does not take title to the products and has no obligation to pay Bongbong Co. until they are sold to the final customers. Any unsold products, excluding those that are lost or damages, can be returned to Bongbong Co. and the latter has discretion to call products back or transfer products to another customer.

Bongbong Co. manufactures the product at a cost of P5,000 per box of Otap bread and P100 per pack of sample bread. There is freight collect of P2,000 for the delivery of 10 boxes of Otap bread to Family Mart but none for the sample bread. The selling price of the Otap product is P8,000 per box for cash sales and P10,000 per box for credit sales with a term of 2/10 n/30. The Family Mart retail store is entitled to a 5% commission on cash sales and 10% commission on net credit sales already collected. Bongbong Co. provides bad debt expense at an estimate of 8% based on ending receivables.

For the month ended December 31, 2016, Family Mart retail store was able to sell to final consumers 3 boxes of Otap bread on cash basis and 5 boxes of Otap bread on account. Also, five packs of sample bread were consumed by final customers during the tasting period. The customers on account paid to Family Mart retail store three out of five boxes sold on credit within the discount period but the remainder continued to be unpaid as of December 31, 2016. At December 31, 2016, Family Mart retail store made its net remittance to Bongbong Co.

Under IFRS 15, what is Bongbong Company's net income for 2016 in connection with the consignment arraignment?

a. P25,560
b. P21,240
c. P20,520
d. P41,140

44. Using the same data in number 43, what is the net remittance to Bongbong Co. on December 31, 2016 by Family Mart Retail Store?
    a. P47,260
    b. P45,320
    c. P41,140
    d. P42,240

45. The following data were provided by the accountants of the Home Office and Branch for the year ended December 31, 2016:

	Home Office Book	Branch Book
Net sales to outside customer	P 1,000,000	P 800,000
Beginning inventory	300,000	140,000
Net purchase from outside supplier	800,000	250,000
Shipment to branch	400,000	
Shipment from home office		500,000
Ending inventory	100,000	200,000
Operating expenses	200,000	100,000

Additional Notes:

- It is the policy of the whole company to use FIFO for its inventories.
- For the year ended December 31, 2015, the Home Office bills its branch with a gross profit rate of 40% based on cost.
- Half of the beginning inventory of the branch was acquired from outside suppliers while ¾ of the ending inventory of the branch was acquired from the home office.

What is the combined net income to be presented by the Home Office in its General Purpose Income Statement for the year ended December 31, 2016
    a. P270,000
    b. P300,000
    c. P290,000
    d. P320,000

46. Using the same data in number 45, what is the understatement of net income reported by the branch in its separate income statement for the year ended December 31, 2016, respectively?
    a. P30,000
    b. P90,000

c. P20,000
d. P40,000

47. The Philippine Government and SLEX Co. entered into a concession arrangement for the construction and operation of Skyway 5 connecting Metro Manila and Batangas Pier. On December 31, 2010, the concession operator constructed the Skyway 5 at a cost of P100,000,000. SLEX Co. has a right or license to charge users over the term of the arrangement of 50 years. The amounts to be received by the concession operator are contingent on the extent that the public uses the Skyway 5. What is the book value of infrastructure asset on December 31, 2012?
    a. P100,000,000
    b. P98,000,000
    c. P96,000,000
    d. P94,000,000

48. The Philippine National Government and Asian Med Co. entered into a concession arrangement for the construction and operation of Charitable Hospital for a period of 10 years. On December 31, 2010, the concession operator constructed the Hospital at a cost of P49,000,000. The arrangement stipulates that Asian Med Co. will be paid a specified amount that will enable it to recover the investment made provided that is has a pre-determined minimum order of hospital beds operating and available. Asian Med Co. has a guaranteed right to receive P8,000,000 at the end of each year. The interpolated effective interest rate is 10%. What is the book value of infrastructure asset on December 31, 2011?
    a. P44,100,000
    b. P41,000,000
    c. P45,900,000
    d. P45,100,000

49. Metrobank USA is a subsidiary of Metrobank Philippines. The functional currency of Metrobank USA is US$ while its presentation currency is Philippine Peso. The following items are translated at

		Transaction rate		Closing rate
Accounts receivable		P 2,000,000		P 3,000,000
Inventory		5,000,000		4,000,000
Sales		10,000,000		15,000,000

In the consolidated financial statements of Metrobank Philippines, the following items shall be presented at

	Accounts Receivable	Inventory	Sales
a.	3,000,000	4,000,000	15,000,000
b.	3,000,000	4,000,000	10,000,000
c.	3,000,000	5,000,000	10,000,000
d.	2,000,000	5,000,000	10,000,000

50. Using the same data in number 49, but assuming the economy of US is experiencing hyperinflation, the following items shall be presented in the consolidated financial statements of Metrobank Philippines at

	Accounts Receivable	Inventory	Sales
a.	3,000,000	4,000,000	15,000,000
b.	3,000,000	4,000,000	10,000,000
c.	3,000,000	5,000,000	10,000,000
d.	2,000,000	5,000,000	10,000,000

51. ABC Co. is translating its foreign currency denominated assets into its functional currency of Philippine Peso as of the end of the year. The following assets are translated at Philippine Peso:

	Transaction rate	Closing rate
Accounts receivable	P 2,000,000	P 3,000,000
Prepaid asset	1,000,000	2,000,000
Building	4,000,000	5,000,000

What is the total assets to be presented by ABC Co. as of the end of the year in its statement of financial position?

a. P10,000,000
b. P7,000,000
c. P8,000,000
d. P9,000,000

52. On January 1, 2020, T, A and J entered into articles of co-partnership for the operation of TAJ computer shop. T contributed investment property with assessed value of P1,700,000 subject to mortgage payable of P500,000 to be assumed by the partnership. A contributed computer equipment with cost of P600,000 with accumulated depreciation of P200,000. The fair market value of

56. On July 1, 2010, Walter Inc. sold a television set at an installment price of P100,000. Walter received P10,000 and old television set with trade-in value of P30,000 as down payment. The fair value of the trade-in TV is P50,000. The agreement provides that the balance will be paid in equal quarterly installment starting September 30, 2010. Walter Inc. manufactured the television set at a cost of P90,000. The customer of Walter Inc. defaulted on the payment of fourth quarterly installment which resulted to repossession of the television set with appraised value of P10,000. On August 31, 2010, the repossessed television set was resold by Walter Inc. at a cash price of P25,000 after being reconditioned at a cost of P6,000.

    What is the realized gross profit to be recognized by Walter Inc. for the year ended December 31, 2010?

    a. P25,000
    b. P20,000
    c. P7,000
    d. P22,500

57. Using the same data in number 56, what is the loss on repossession to be recognized by Walter Inc. for the year ended December 31, 2011?

    a. P1,250
    b. P5,000
    c. P3,750
    d. P2,500

58. Using the same data in number 56, what is the realized gross profit to be recognized by Walter Inc. for the year ended December 31, 2011?

    a. P3,750
    b. P15,000
    c. P12,750
    d. P18,750

59. On December 1, 2009, Caritas, a nonstock nonprofit organization, received P1,000,000 fund from a philanthropist who provided a restriction that the said fund shall only be used for the research project of the organization. On December 31, 2010, Caritas used P100,000 of the said fund for the research project.

    What is the effect of the transaction to net assets of Caritas for the year ended December 31, 2010?

    a. Increase in unrestricted net asset by P100,000

the computer equipment is P300,000. On January 2, 2020, the partnership was able to sell the investment property for P2,000,000. How much cash shall be contributed by J if the articles of co-partnership provide that T will have 60% interest in the partnership?

a. P500,000
b. P700,000
c. P800,000
d. P600,000

53. On December 31, 2010, the capital balance of partners A, R and T of ART Partnership are P2,000,000, P5,000,000 and P3,000,000, respectively with profit or loss agreement ratio of 1:3:6, respectively. On January 1, 2011, S is admitted to the partnership by acquiring 40% of T's capital interest and profit interest at a price of P1,500,000. ARTS partnership reported P1,000,000 net income for year 2011. What is the capital balance of S on December 31, 2011?

a. P1,740,000
b. P1,900,000
c. P1,440,000
d. P1,600,000

54. On December 31, 2020, the capital balance of partners C, P and A of CPA Partnership are P1,000,000, P3,000,000 and P6,000,000, respectively with profit or loss agreement ratio of 4:1:5. On January 1, 2021, C decided to retire and received P400,000 from the partnership. If the assets of the partnership are not properly valued at the time of retirement, how much is the capital balance of Paula after the retirement of C?

a. P2,900,000
b. P2,850,000
c. P3,100,000
d. P3,150,000

55. On December 31, 2040, the capital balance of partners B, A and R of BAR are P2,000,000, P5,000,000 and P1,000,000, respectively with profit or loss agreement ratio of 2:3:5. On January 1, 2041, E was admitted to BARE partnership upon investment of P3,000,000 for 25% interest in the new partnership with new total agreed capitalization of P16,000,000. How much is the share of A in the asset revaluation?

a. P1,200,000
b. P2,500,000
c. P1,500,000
d. P3,125,000

b. Decrease in temporarily restricted net asset by P100,000
c. No effect on net asset
d. Decrease in unrestricted net asset by P100,000

60. On January 1, 2031, PNB and Allied Bank entered into a contract of merger wherein PNB will issue 100,000 ordinary shares with par value of P10 and quoted price of P20 to the existing shareholders of Allied in exchange for the net assets of Allied Bank. PNB paid acquisition related cost of business combination amounting to P100,000 and stock issuance cost amounting to P200,000. As of December 31, 2030, PNB has total assets with book value of P50M and fair market value of P60M while Allied Bank has total assets with book value of P5M and fair market value of P4M. The net assets of Allied Bank on December 31, 2030 is P2.6M.

What is the total assets of PNB on January 1, 2031 after the merger?

a. P54,100,000
b. P64,100,000
c. P55,100,000
d. P65,100,000

61. Using the same data on number 60, what is the goodwill/(gain on bargain purchase) arising from business combination?

a. (P600,000)
b. P800,000
c. P600,000
d. P400,000

62. On January 1, 2020, Entity A, a public entity, acquired 90% of outstanding ordinary shares of Entity B. All the assets and liabilities of Entity B are properly valued except for its only building with cost of P1,000,000 and accumulated depreciation of P100,000 without any residual value. On January 1, 2020, the building is already two years of age. The fair value of the building on January 1, 2020 is P720,000. On July 1, 2020, Entity B sold the said building to Entity A at a loss of P90,000. On December 31, 2020, what is the consolidated book value of the said building to be presented in the Consolidated Statement of Financial Position of Entity A?

a. P680,000
b. P850,000
c. P595,000
d. P700,000

63. Entity A, the parent corporation of Entity B, is operating in the Philippines and its presentation currency in its consolidated financial statements is Philippine Peso. Entity A's subsidiary is Entity B which is operating in USA where the functional currency is USA Dollar. On January 1, 2020, Entity B acquired an investment property in at a cost of 1,000 yen with useful life of 5 years. On December 31, 2020, the fair value of investment property is 1,200 yen. It is the company policy of Entity A and Entity to account all their investment property using fair value model. The following direct exchanges rates are given:

January 1, 2020		1Y = 3$		1$ = P45
December 31, 2020		1Y = 4$		1$ = P40

What is the book value of such Investment Property to be presented in the Consolidated Statement of Financial Position of Entity A on December 31, 2020?

a. P192,000
b. P144,000
c. P96,000
d. P216,000

64. On January 1, 2020, Entity A and Entity B established a new corporation named Entity C. The common stocks of this corporation will be owned equally by Entity A and Entity B. This corporation will manufacture car components that can be sold to the incorporators and third persons. The contractual arrangement between Entity A and Entity B provides that the relevant activities of Entity C will require unanimous vote of the said parties. Entity C is normally required to operate at breakeven. The assets and liabilities of Entity C will be directly in the name of Entity A and Entity B. During 2020, Entity C reported total sales amounting to P5,000,000 inclusive of sales to Entity A and Entity B in the amount of P1,000,000 and P2,000,000, respectively. During 2020, Entity A was able to resell 80% of said inventory from Entity C to third persons while Entity B was able to resell 70% of inventory from Entity C to third persons.

What is the amount sales revenue to be reported by Entity B Inc. in relation to his interest to this arrangement for the year ended December 31, 2020?

a. P2,100,000
b. P2,000,000
c. P1,500,000
d. P1,800,000

65. On January 1, 2020, a franchisor entered into a franchise agreement with a franchisee. The contract requires the franchisee to pay a non-refundable upfront fee of P900,000 at the date of contract signing and on-going royalty equivalent to 10% of franchisee's sales revenue. On January 1, 2020, the franchisee paid the non-refundable upfront fee of P900,000.

    The franchise agreement requires the franchisor to render the following separate and distinct performance obligations:

    - Construction of franchisee's stall with stand alone selling price of P500,000.
    - Delivery of 10,000 units of raw materials to franchisee with stand alone selling price of P300,000.
    - Allowing the franchisee to use the franchisor's tradename and trademark for a maximum period of 10 years counted from the date of signing of contract with stand alone selling price of P200,000.

    On July 1, 2020, the franchisor completed the construction of the franchisee's stall which allowed the franchisee to start its operation. As of December 31, 2020, the franchisor was able to deliver 20,000 unit of raw materials to the franchisee. For the year ended December 31, 2020, the franchisee reported sales revenue of P400,000.

    What is the total revenue to be reported by the franchisor for the year ended December 31, 2020?

    a. P620,000
    b. P562,000
    c. P522,000
    d. P580,000

66. Using the same data in number 65, what is the unearned revenue to be reported by the franchisor on December 31, 2020?

    a. P378,000
    b. P420,000
    c. P338,000
    d. P380,000

67. On January 1, 2020, an entity entered into a long-term construction contract to be completed on June 30, 2020 at an original contract price of P2,000,000. Due to

the change in structural design as requested by the customer, the contract price increased by P3,000,000 for the year ended December 31, 2021. The project was completed on September 30, 2022 which resulted to penalty of P1,000,000 for delayed construction. The following data were provided by the cost accountant of the entity:

	2020	2021	2022
Cost incurred during the year	P300,000	P2,820,000	P380,000
Estimated remaining cost to complete at the end of the year	P1,200,000	P2,080,000	-

What is the realized gross loss to be recognized by the entity for the year ended December 31, 2021 under percentage of completion method?

a. (P200,000)
b. (P220,000)
c. (P300,000)
d. (P240,000)

68. Using the same data in number 67, what is the realized gross profit to be recognized by the entity for the year ended December 31, 2022 under cost recovery method?

a. P1,700,000
b. P500,000
c. P200,000
d. P700,000

69. On January 1, 2020, an entity entered into a long-term construction contract with fixed contract price of P5,000,000. The entity billed its client as follows: 30% during 2020, 40% during 2021 and the remainder at the year of project completion. The following data were provided by the cost accountant of the entity:

	2020	2021	2022
Cumulative Cost incurred as of the end of the year	P2,200,000	P3,600,000	P4,800,000
Estimated remaining cost to complete at the end of the year	P3,300,000	P900,000	-

What is the excess of construction in progress over progress billings on December 31, 2020 under percentage of completion method?

a. P500,000
b. P200,000
c. P300,000
d. P400,000

70. Using the same data in number 69, what is the excess of construction in progress over progress billings on December 31, 2021 under cost recovery method?

a. P100,000
b. P500,000
c. P300,000
d. P400,000

71. On January 1, 2020, Entity A acquired 70% of outstanding ordinary shares of Entity B at a price of P1,000,000. Entity A incurred P200,000 cost related to acquisition. At acquisition date, the book value of net assets of Entity B is P2,500,000 but a machinery with useful life of 10 years is overstated by P500,000. For the year ended December 31, 2020, Entity B reported net income of P350,000 and declared dividend in the amount of P100,000 to its ordinary shareholders. The fair value of the Investment in Entity B is measured at P1,800,000 on December 31, 2020 with cost to sell of 15% while its value in use is discounted at P1,750,000. If Entity A accounted its Investment in Entity B using equity method in its separate financial statements, what is the book value of Investment in Entity B to be reported by Entity A on December 31, 2020 in its separate statement of financial position?

a. P1,750,000
b. P1,800,000
c. P1,530,000
d. P1,610,000

72. Using the same data in preceding number, what is the net effect in Entity A's net profit in its separate income statement assuming it accounted its Investment in Entity B using fair value model through profit or loss in its separate income statement?

a. Increase in profit by P670,000
b. Increase in profit by P870,000
c. Increase in profit by P600,000
d. Increase in profit by P800,000

73. Using the same data in preceding number, what is the book value of Investment in Entity B to be reported by Entity A on December 31, 2020 in its separate statement of financial position assuming it accounted its Investment in Entity B using cost method?
    a. P1,800,000
    b. P1,530,000
    c. P1,200,000
    d. P1,000,000

74. On July 1, 2020, a Filipino entity whose functional currency is Philippine Peso acquired 1,000 common stocks of an American entity at a price of $5 per share. The Filipino enttiy accounted the investment in common stocks at financial asset at fair value through profit or loss. On October 1, 2020, the American entity declared and distributed 20% same share dividends to its common stockholders. On December 31, 2020, the common stocks of the American entity are traded at $4 per share. The direct foreign currency exchange rates are $1=P50 on July 1, 2020 and $1=P52 on December 31, 2020. What is the foreign currency gain or loss exclusive of gain or loss on changes in fair value to be recognized Filipino entity for the year ended December 31, 2020?
    a. P8,000 gain
    b. P10,000 gain
    c. P9,600 gain
    d. P8,400 gain

75. On July 1, 2020, a Filipino entity whose functional currency is Philippine Peso purchased on account inventories at a cost of $100 to be paid on June 30, 2021. On October 1, 2020, the said inventories were sold on account by the Filipino entity at a selling price of $150 to be collected on September 30, 2021. The following direct foreign exchange rates are given:

	July 1, 2020	October 1, 2020	Dec. 31, 2020
Buying spot rate	P40	P42	P45
Selling spot rate	P50	P48	P52

What is the cost of goods sold to be reported by the Filipino entity for the year ended December 31, 2020?
    a. P1,300

b. P2,100
c. P2,400
d. P3,200

76. Using the same data in preceding number, what is the net foreign currency gain or loss for the year ended December 31, 2020?
    a. P150 net gain
    b. P250 net gain
    c. (P350) net loss
    d. (P50) net loss

77. On January 1, 2020 Entity A acquired the net assets of Entity B by issuing common stocks with fair value of P150,000 and par value of P100,000. Aside from that, Entity A is required to pay P132,000 cash to the owners of Entity B on December 31, 2020. The applicable effective interest rate of this contingent consideration is 10%. On January 1, 2020, the net assets of Entity B is reported at a book value of P250,000. On the acquisition date, all assets and liabilities of Entity B are property valued except for the inventory that is undervalued by P20,000 and the note payable that is overvalued by P30,000. As a result of acquisition, Entity A incurred and paid the following costs: (1) acquisition related cost of P20,000; (2) indirect cost of acquisition of P10,000; and (3) stock issuance costs of P30,000. What is the goodwill or gain on bargain purchase arising from business combination to be recognized by Entity A on January 1, 2020?
    a. P30,000 gain on bargain purchase
    b. P10,000 gain on bargain purchase
    c. P18,000 gain on bargain purchase
    d. P20,000 goodwill

78. Filipino Entity is operating in the USA where the functional currency is the USA $. The presentation currency of Filipino Entity is Philippine Peso because all its owners are Filipinos. On January 1, 2020, the Filipino Entity acquired an investment property at a cost of $1,000 with useful life of 10 years without residual value. Filipino Entity elected cost model in the accounting of its investment property. On December 31, 2020, the fair value of investment property is determined to be $1,200. The direct foreign currency exchange rates are $1=P50 on January 1, 2020 and $1=P40 on December 31, 2020. What is the carrying amount of Investment Property to be presented in the Statement of Financial Position of Filipino Entity?
    a. P48,000
    b. R45,000

c. P60,000
d. P36,000

79. On January 1, 2020, Entity A acquired 15% of outstanding common stocks of Entity B at a price of P120,000 and paid acquisition related costs of P10,000. Entity A acquired the investment for trading purposes. On April 1, 2020, Entity A acquired additional 25% of outstanding common stocks of Entity B at a price of P200,000 and paid acquisition related costs of P30,000. On July 1, 2020, Entity A acquired additional 50% of outstanding common stocks of Entity B at a price of P500,000 and paid acquisition related costs of P50,000. On July 1, 2020, Entity B's net asset is reported at P1,000,000 but its land is overstated by P300,000 while its building is understated by P100,000. It is the company policy of Entity A to initially measure the Non-controlling Interest in Net Assets at fair value. Entity B reported net income for the year ended December 31, 2020 in the amount of P100,000. What is the goodwill to be recognized by Entity A arising from acquisition of Entity B in its Consolidated Statement of Financial Position as of December 31, 2020?

A. P180,000
B. P200,000
C. P250,000
D. P300,000

80. The following transactions occurred for the period ended regarding Entity A and its two subsidiaries, Entity B and Entity C:

- On January 1, 2020, Entity A acquired 60% of the outstanding common stocks of Entity B. On April 1, 2020, Entity A acquired 70% of the outstanding common stocks of Entity C. It is the policy of Entity A to accounts all its investments in subsidiary using cost method in its separate financial statements.
- On May 1, 2020, Entity A sold inventory to Entity C at a price of P100,000. On June 1, 2020, Entity C resold the inventory coming from Entity A at a price of P150,000 as follows: 80% to unrelated parties and 20% to Entity B.
- On July 1, 2020, Entity B sold a new set of inventory to Entity C at a price P200,000. On August 1, 2020, Entity C resold the inventory coming from Entity B at a price of P300,000 as follows: 40% to unrelated parties and 60% to Entity A.
- For the period ended December 31, 2020, the affiliates reported the following sales revenues in their separate income statement:

- Entity A - Sales Revenue P3,000,000
- Entity B - Sales Revenue 2,000,000
- Entity C - Sales Revenue 1,000,000

What is the consolidated sales revenue to be reported by Entity A in its consolidated income statement for the year ended December 31, 2020?

A. P5,700,000
B. P5,870,000
C. P5,490,000
D. P5,620,000

END

ANSWER KEY

1. A	21. B	41. A	61. D
2. B	22. A	42. D	62. A
3. D	23. C	43. A	63. A
4. B	24. D	44. A	64. A
5. C	25. B	45. B	65. B
6. B	26. A	46. B	66. A
7. C	27. B	47. C	67. C
8. C	28. A	48. C	68. D
9. D	29. C	49. B	69. B
10. C	30. B	50. A	70. A
11. B	31. A	51. C	71. D
12. D	32. D	52. B	72. A
13. B	33. C	53. C	73. C
14. B	34. D	54. B	74. C
15. C	35. B	55. C	75. A
16. A	36. D	56. D	76. B
17. C	37. C	57. A	77. A
18. D	38. B	58. C	78. D
19. D	39. D	59. B	79. B
20. B	40. A	60. A	80. C

41. Solution

Transaction	Home Office (Br. Book)	Inv. in Branch (HO Book)
Unadjusted balances	54,700	**51,100 (41) (A)**
a.		(24,000)
b.		30,000
c.		
d.	(7,200)	
e.		(2,400)
f.		(7,200)
Adjusted balances	47,500	47,500

42. Solution

Transaction	Home Office (Br. Book)	Inv. in Branch (HO Book)
Unadjusted balances	**111,170 (42) (D)**	165,920
a.	(53,960)	
b.		(10,000)
c.	75,000	
d.		(65,700)
e.		
f.	(90)	
Adjusted balances	90,220	90,220

Solution

Problem 43 and 44

Cash sales (3 x 8000)	
Credit sale (5 x 10,000)	
Total sales	
Less: Sales discount (30,000 x 2%)	600
Cost of sales (50,000 + 2.000 x 8/10)	41,600
Sample expenses (100 x 5)	500
Bad debts expense (20,000 x 8%)	1,600
Sales commission (5% x 24,000) + (10% x 29,400)	4,140
Net income of consignor	**(A**

Cash sales collections	24,000
Credit sales collections (30,000 x 98%)	29,400
Total	53,400
Less Freight in collect 2,000	
Sales commission 4,140	6,140
Net remittance by consignee to consignor	**(A)47,260**

Solution

Problem 45 and 46

Net sales to outsider (1,000,000 + 800,000)	1,800,000
Less Combined cost of sales (300,000+120,000+800,000+ 250,000–100,000–170,000)	1,200,000
Balance	600,000
Less Operating expenses	300,000
Combined net income	**(B) 300,000**

Overvaluation during the year	100,000
Unrealized gross profit on Beginning inventory of Branch (70,000 x 40/140)	20,000
Total	120,000
Less Unrealized gross profit on Ending inventory of Branch (150,000 x 25/125)	30,000
Net understatement in net income of branch	**(B) 90,000**

Solution

Problem 47

Infrastructure asset classified as intangible asset measured at cost less accum. Depreciation (100,000,000 – 2,000,000 -2,000,000)	**(C) 96,000,000**

Solution

Problem 48

Infrastructure asset classified as financial asset at amortized cost measured at amortized cost (49,000,000 x 1.10 – 8,000,000)	**(C) 45,900,000**

Solution
Problems 49 and 50
49. (B) In translating functional currency financial statements to the entity's presentation currency, all assets and liabilities are translated at closing rate while income and expense accounts are translated at transaction or average rate.

50. (A) In translating functional currency financial statements to entity's presentation currency with hyperinflation, all elements of financial statements are translated at closing rate.

Solution:
Problem 51

Accounts receivable at closing rate	3,000,000
Prepaid asset at transaction rate	1,000,000
Building at transaction rate	4,000,000
Total assets at functional currency	**(C) 8,000,000**

Solution:
Problem 52

Fair value of investment property (net proceeds from sale)	2,000,000
Less Mortgage payable to be assumed by the partnership	500,000
Capital contribution of T	1,500,000
Divide by 60% interest of T	60%
Total agreed capital contribution of partnership	2,500,000
Multiply by 40% interest for A and J	40%
Required capital contribution of A and J	1,000,000
Less Fair value of equipment contributed by A	300,000
Cash to be contributed by J	**(B) 700,000**

Solution
Problem 53

January 1, 2011 capital of S (3,000,000 x 40%)	1,200,000
Share in net income for 2011 of S (1,000,000 x 60% x 24%)	240,000
December 31, 2011 capital of S	**(C) 1,440,000**

Solution
Problem 54

Capital balance of P before C's retirement	3,000,000
Add share of P in asset's impairment (600,000/40% x 10%)	(150,000)
Capital balance of P after C's retirement	**(B) 2,850,000**

Solution

Problem 55

Total contributed capital of all partners (2,000,000 + 5,000,000 + 1,000,000 + 3,000,000)	11,000,000
Less total agreed capitalization	16,000,000
Asset revaluation of existing assets of old partnership	5,000,000
Share of A in asset revaluation(5,000,000 x 30%)	**(C) 1,500,000**

Solution

Problems 56 – 58

Unadjusted installment sales reported by Walter Inc	100,000
Add underallowance of traded inventory (50,000 – 30,000)	20,000
Adjusted installment sales	120,000
Less cost of production	90,000
Gross profit	30,000
Gross profit rate on sales (30,000/120,000)	**25%**
Fair value of traded inventory	50,000
Cash down payment	10,000
Installment received for Sept and Dec. (15,000 + 15,000)	30,000
Total collection	90,000
Multiply by gross profit rate	25%
Realized gross profit for 2010	**(D) 22,500**
Appraised value of repossessed television set	10,000
Less unrecovered cost	11,250
Loss on repossession	**(A)(1,250)**
Realized gross profit on 3rd quarterly collection (15,000 x 25%)	3,750
Add realized gross profit on sale of repossessed inventory (25,000 - 10,000 – 6,000)	9,000
	(C) 12,750

Solution:

Problems 65 – 66

Construction revenue (900,000 x 5/10)	450,000
Sales revenue [(900,000 x 3/10) x 2,000/10,000]	54,000
License revenue [(900,000 x 2/10)/10]	18,000
Royalty revenue (400,000 x 10%)	40,000
Total revenue 2020	**(B) 562,000**
Unearned sales revenue [(900,000 x 3/10) x 8,000/10,000]	216,000
Unearned license revenue [(900,000 x 3/10) x 9/10]	162,000
Unearned revenue 12/31/2020	**(A) 378,000**

Solution:

Problem 67 – 68

Cumulative loss, 12/31/2021 (5,000,000 – 5,200,000)	(200,000)
Less cumulative gross profit, 12/31/2020 (500,000 x 20%)	100,000
Realized gross loss under POC method	**(C)(300,000)**
Actual cumulative gross profit, 12/31/2022 (4M – 3.5M)	500,000
Less cumulative gross loss, 12/31/2021 (5M – 5.2M)	(200,000)
Realized gros profit under CR method 2022	**(D) 700,000**

Solution

Problems 69 – 70

CIP, 12/31/2020 [2.2M – (5M - 5.5M)]	1,700,000
Less PB, 12/31/2020 (5,000,000 x 30%)	1,500,000
Excess of CIP over PB, 12/31/2020 POC method	**(B) 200,000**
CIP, 12/31/2021 (cumulative cost only)	3,600,000
Less PB, 12/31/2021 (5,000,000 x 70%)	3,500,000
Excess of CIP over PB, 12/31/2021 CR method	**(A)100,000**

Solution:

Problems 71 – 73

Investment in Entity B at historical cost (1,000,000 + 200,000)	1,200,000
Gain on bargain purchase (1,200,000 – 1,400,000)	200,000

Solution
Problems 60 – 61

Book value of total assets of PNB (acquirer)	50,000,000
Add fair value of total assets of Allied Bank (acquirer)	4,000,000
Add goodwill from merger [2,000,000 – (2,600,000 – 1,000,000)]	400,000
Total	54,400,000
Less cash paid for DC of business combination and stock issuance cost (100,000 + 200,000)	300,000
Total assets of PNB after merger	**(A) 54,100,000**

Fair value of consideration given up by PNB (100,000 x 20)	2,000,000
Less fair value of net assets acquired (2,600,000 – 1,000,000)	1,600,000
Goodwill arising from merger	**(D) 400,000**

Solution
Problem 62

Book value, 12/31/2020 (Depreciated fair value) (720,000 x 17/18)	**(A) 680,000**

Solution
Problem 63

Book value, 12/31/2020 (Y1,200 x $4 x P40)	**(A)192,000**

Solution
Problem 64

Total sales of Entity C		5,000,000
Less: Unsold inventory by Entity A – 3rd person (1M x 20%)	200,000	
Unsold inventory by Entity B – 3rd person (2M x 30%)	600,000	800,000
Balance		4,200,000
Multiply by		50%
Sales revenue to be reported by Entity B		**(A)2,100,000**

Share in net income of Entity B [(350,000+50,000)x70%]	280,000
Total	1,680,000
Less dividend from Entity B (100,000 x 70%)	70,000
Book value under equity method	**(D) 1,610,000**
Transaction cost	(200,000)
Dividend income from Entity B (350,000+50,000) x 70%]	70,000
Gain on changes in fair value (1,000,000 – 1,800,000)	800,000
Net increase in profit under fair value model Through profit or loss	**(A) 670,000**
Book value under cost model at historical cost (1,000,000 + 200,000)	**(C) 1,200,000**

Solution

Problem 74

Foreign currency gain, July 1, 2020 transaction rate	P 50
Less Dec. 31, 2020 rate when fair value is determined	52
Gain per foreign currency unit	2
Multiply by fair value of investment (1,000 x 1.20 x 4)	4,800
Foreign currency gain	**(C) 9,600**

Solution

Problem 75

Sales revenue (150 x 42)	6,300
Less cost of goods sold	5,000
Gross profit	**(A)1,300**

Solution

Problem 76

Forex loss on increase of AP [(50-52) x 100]	(200)
Forex gain on increase of AR [(42-45) x 150]	450
Net forex gain	**(B) 250**

Solution:

Problem 77

BVNAA	250,000
Undervaluation of inventory	20,000
Overvaluation of notes payable	30,000
FVNAA	**300,000**

FV of common stock issued	150,000
FV of contingent consideration (132,000/1.10)	120,000
FV of consideration given up	270,000
Less FVNAA	300,000
Gain on bargain purchase	**(A)30,000**

Solution

Problem 78

Historical cost of investment property	1,000
Less accumulated depreciation	100
Book value of investment property under cost model	900
Multiply by closing rate (functional to presentation)	40
BV of investment property in presentation currency	**(D) 36,000**

Solution

Problem 79

FV of existing interest in investee (50,000/50% x 40%)	400,000
FV of consideration given up	500,000
FV of NCI (500,000/50% x 10%)	100,000
Total	1,000,000
Less FVNAA (1,000,000 – 300,000 + 100,000)	800,000
Goodwill	**(B) 200,000**

Solution

Problem 80

2020 sales of A to C	100,000
2020 sales of C to B (150,000 x 20%)	30,000
2020 sales of C to A (300,000 x 60%)	180,000
2020 sales of B to C	200,000
Total	510,000
Less total sales of A, B, and C	6,000,000
2020 Consolidated sales	**(C) 5,490,000**